

AGRICULTURAL OUTLOOK 1993

Participant Discussion Aids

Prepared by

Allan Lines
Norman Rask
Gary Schnitkey
Luther Tweeten

Agricultural Economists
Department of Agricultural Economics and Rural Sociology
The Ohio State University

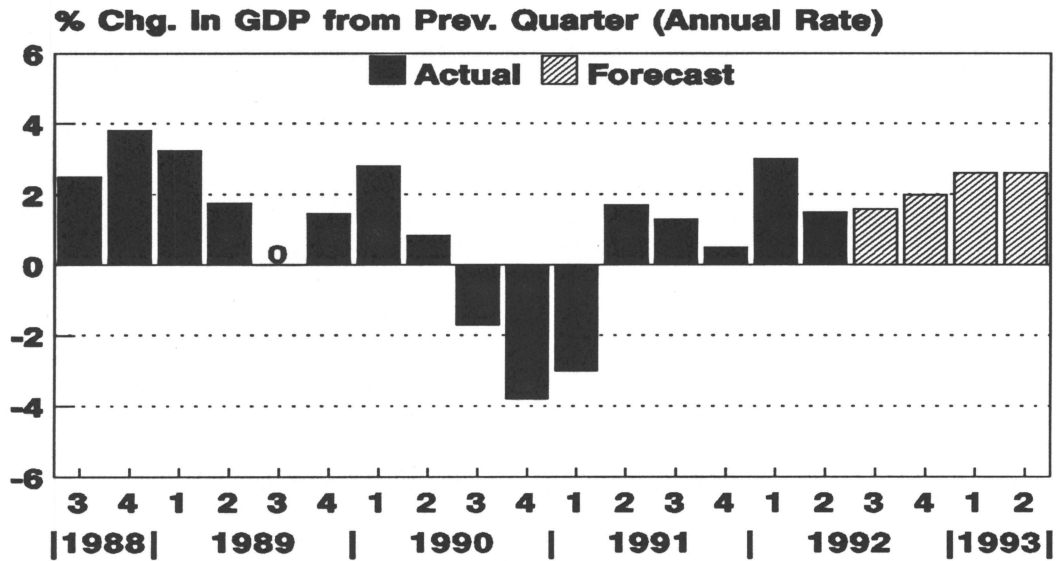
November 1992

NATIONAL ECONOMY
AGRICULTURAL POLICY
FARM INCOME AND FINANCE

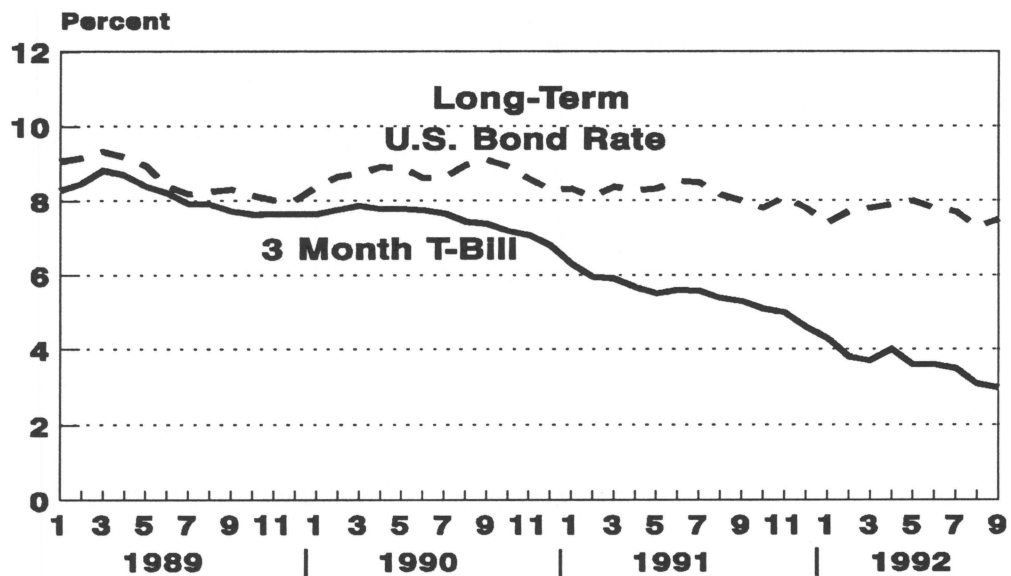
Discussion-Aids Prepared by

Luther Tweeten

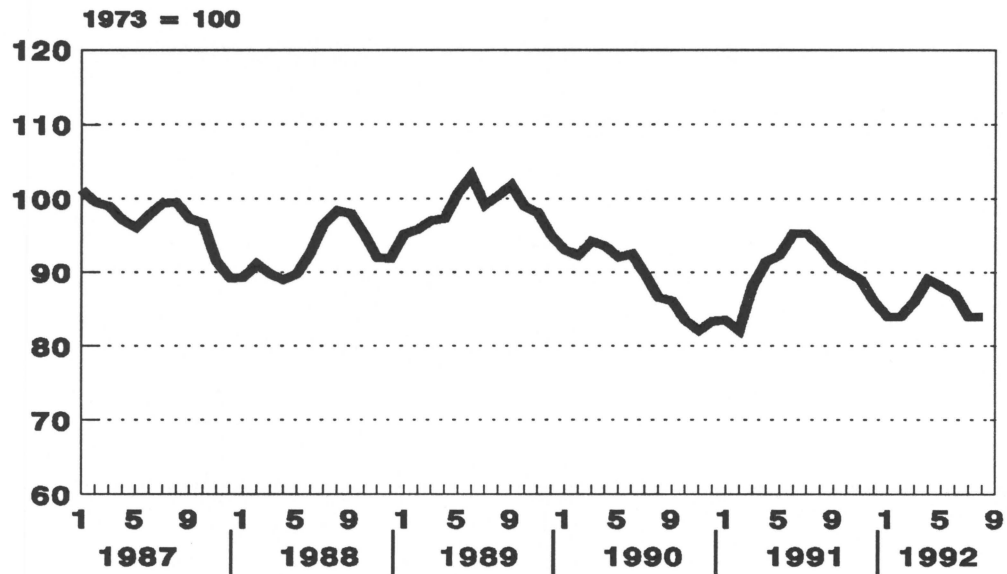
ECONOMIC GROWTH SLOW BUT POSITIVE



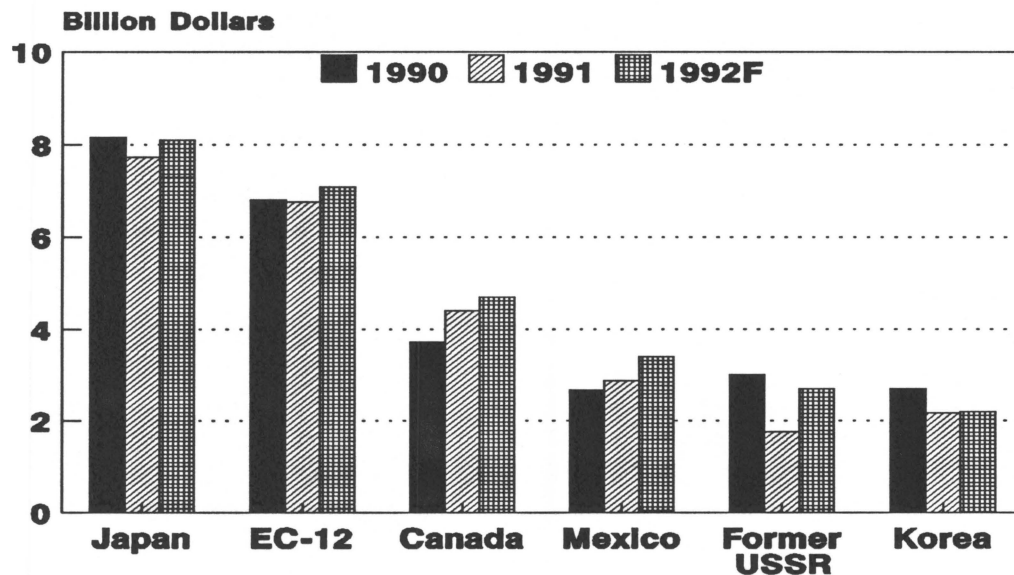
WIDENING INTEREST RATES SIGNAL MONETARY EXPANSION



EXCHANGE RATES FALL Trade-Weighted Value of the Dollar



TOP SIX MARKETS TAKE 70% OF U.S. AG EXPORTS

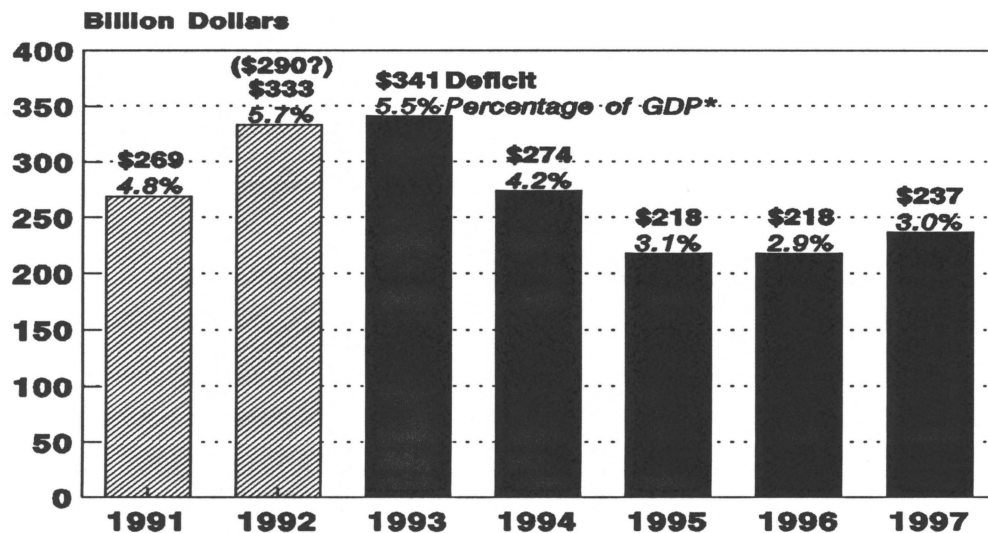


ECONOMIC GROWTH RATES EXPECTED TO RISE

	1992	1993F
Developed Countries (less U.S.)	1.2	2.4
Developing Countries	5.2	5.2
Eastern Europe and C.I.S.	-12.2	0.4
World Less U.S.	0.3	2.8
U.S.	2.0	2.6

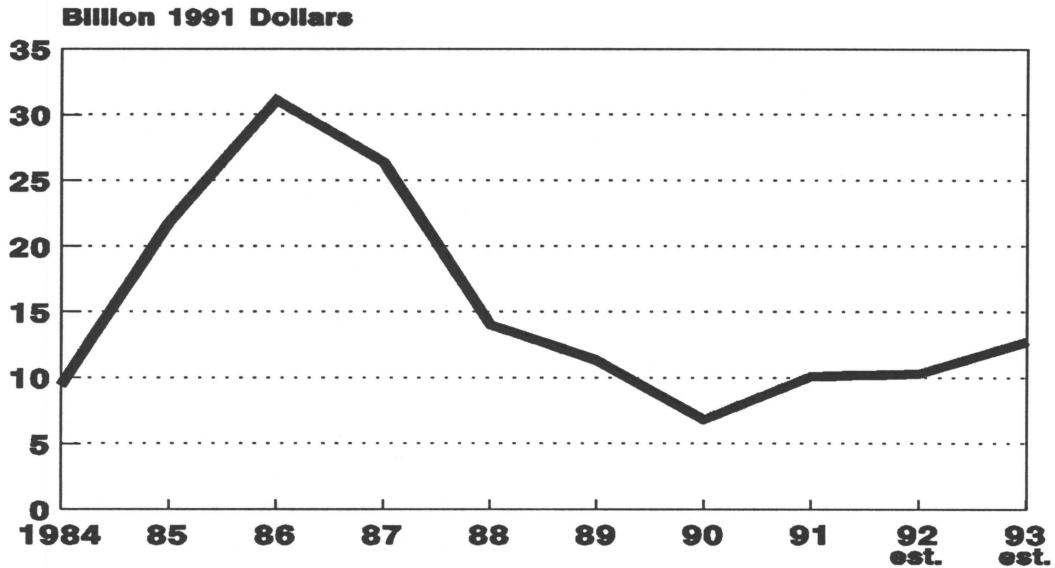
Source: USDA.

WHITE HOUSE PROJECTS LOWER DEFICITS

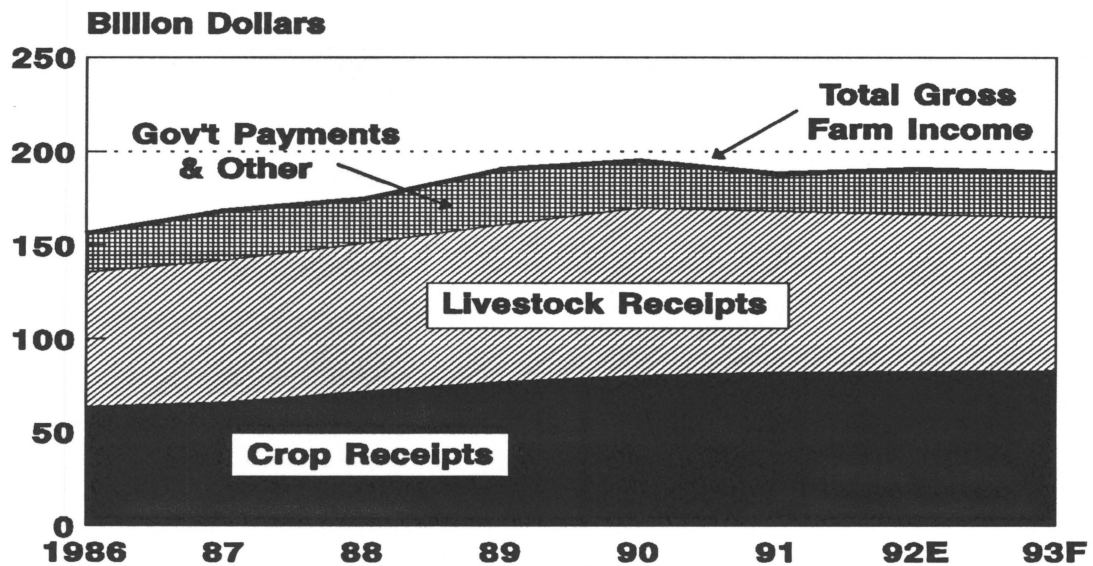


*Gross Domestic Product is the total value of all goods & services produced in this country.

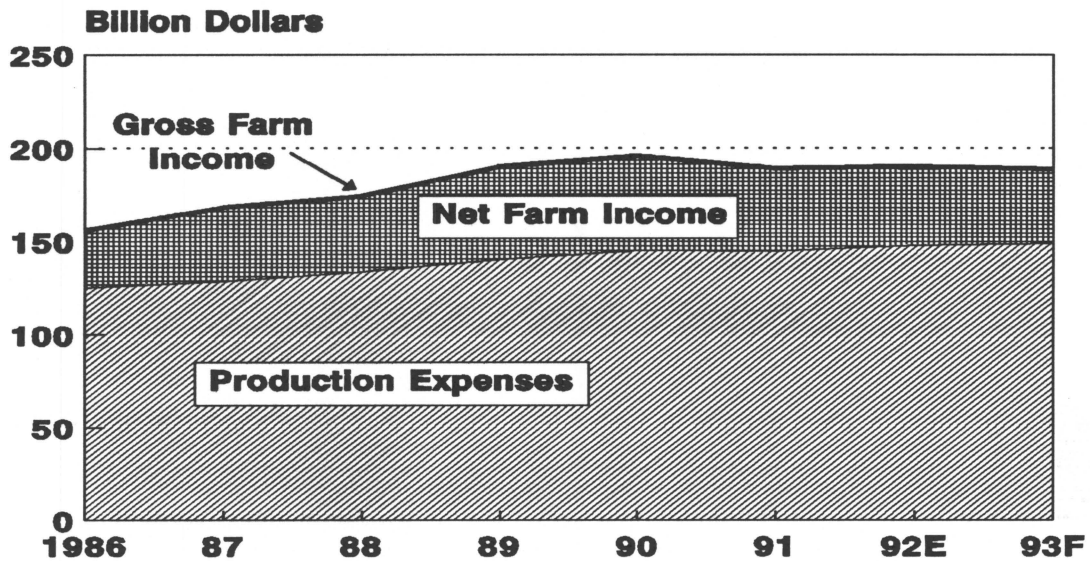
LOW BUT RISING REAL U.S. CCC NET OUTLAYS



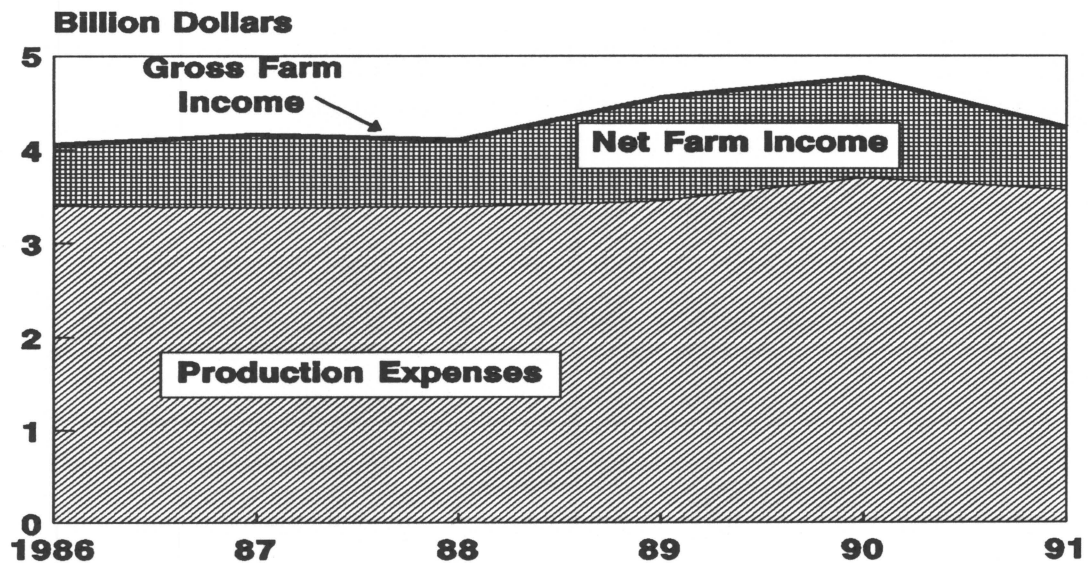
CROP AND LIVESTOCK RECEIPTS ABOUT EVEN



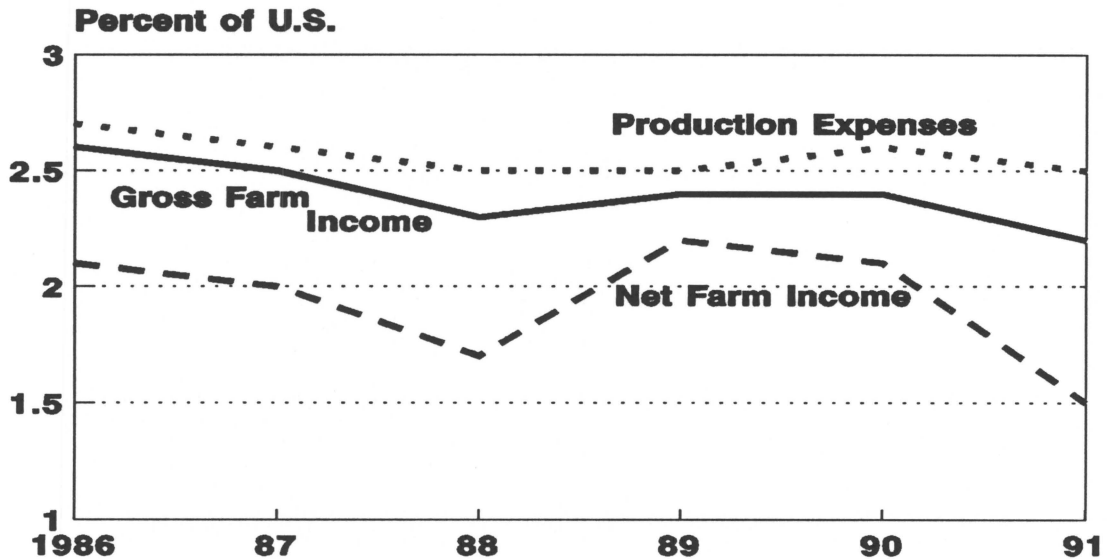
U.S. FARM INCOME STEADY AFTER 1990 PEAK



OHIO FARM INCOME DECLINES AFTER 1990 PEAK



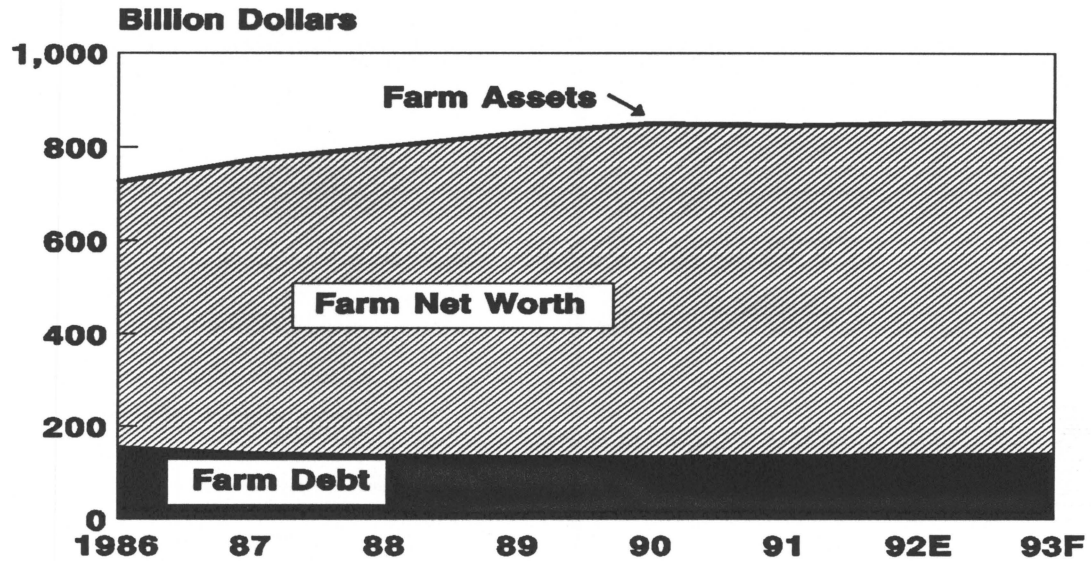
OHIO'S SHARE OF U.S. FARM INCOME ERODING



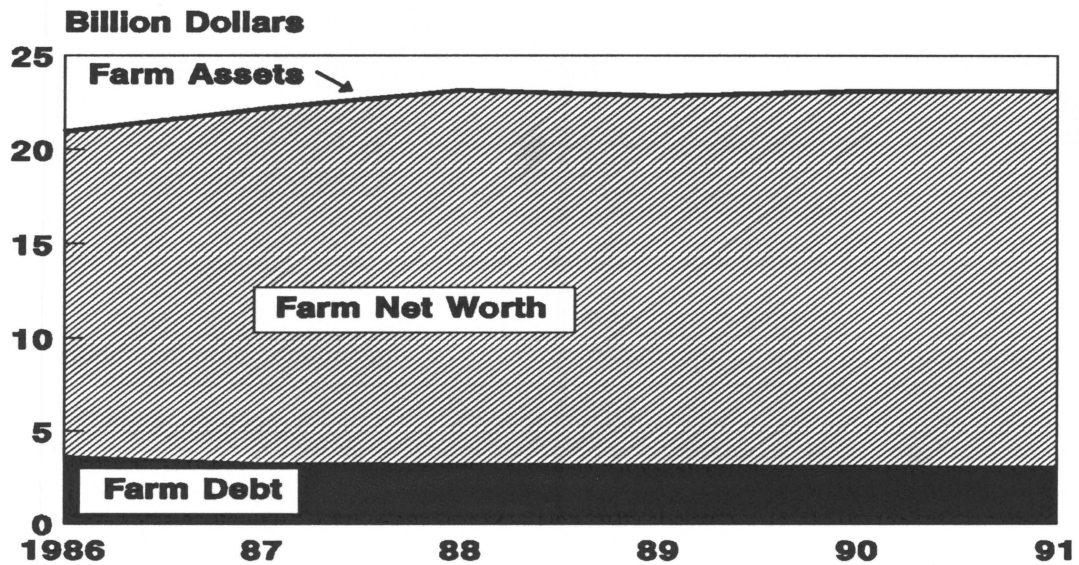
EXPECTED CHANGE FROM 1992 TO 1993, U.S. FARM INCOME

	(\$ Billion)
Receipts	
Crop Receipts	+ 0.5
Livestock Receipts	- 2.0
Direct Payments	+ 1.5
Total Cash Farm Income	+ 0.0
Expenses	
Manuf. Inputs, Repairs, Labor	+ 3.0
Interest, Farm-Origin Inputs	- 2.0
Production Expenses	+ 1.0
Net Cash Income	- 1.0

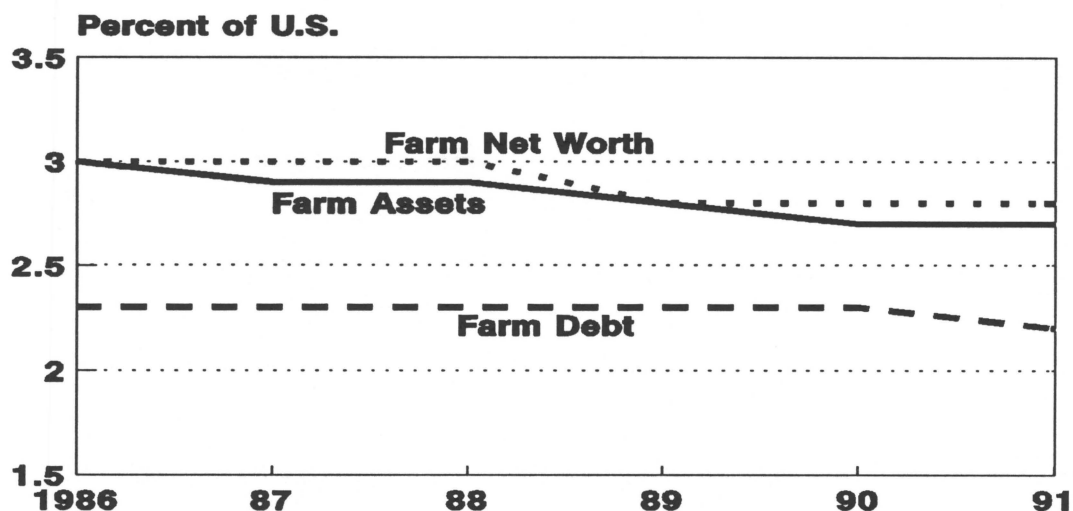
U.S. FARM NET WORTH STEADY SINCE 1990



OHIO FARM NET WORTH STEADY SINCE 1988



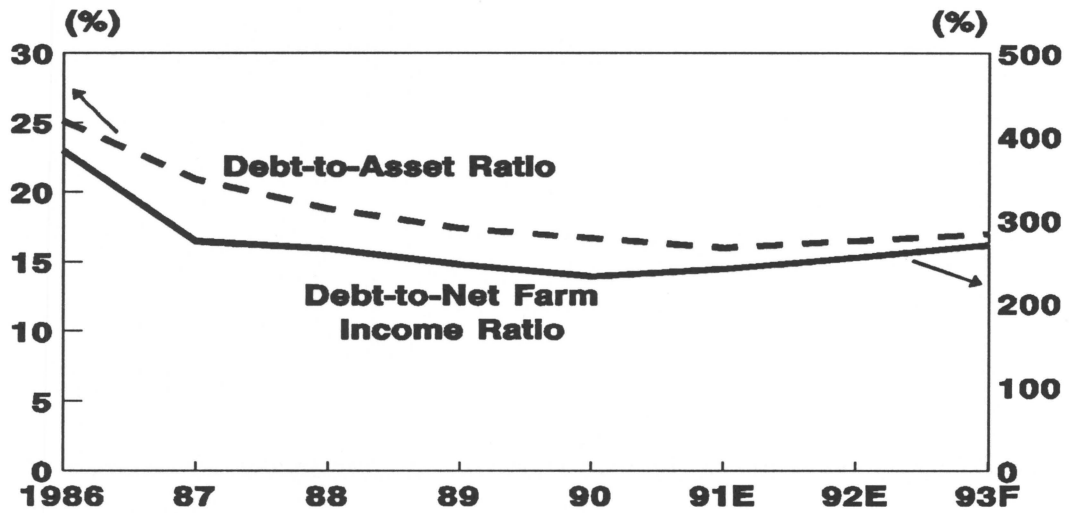
OHIO'S SHARE OF U.S. BALANCE SHEET OFF SLIGHTLY



EXPECTED CHANGE FROM 1992 TO 1993, U.S. FARM BALANCE SHEET

	(\$ Billion)
Assets	
Real Estate	+ 0
Non-real Estate	+ 1
Total Assets	+ 1
Debt	
Real Estate	+ 0
Non-real Estate	+ 1
Total Debt	+ 1
Net Worth	+ 0

U.S. FARM FINANCIAL RATIOS A LITTLE LESS FAVORABLE



INTERNATIONAL TRADE, PRODUCTION INPUTS, AND ETHANOL UPDATE

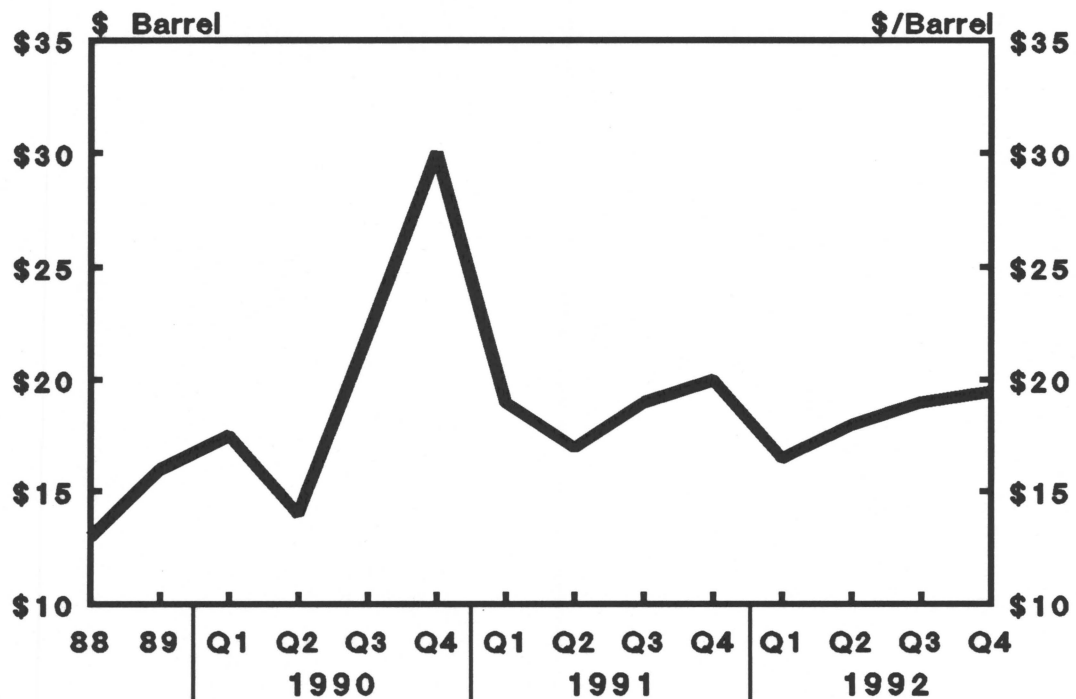
Discussion-Aids Prepared by

Norman Rask

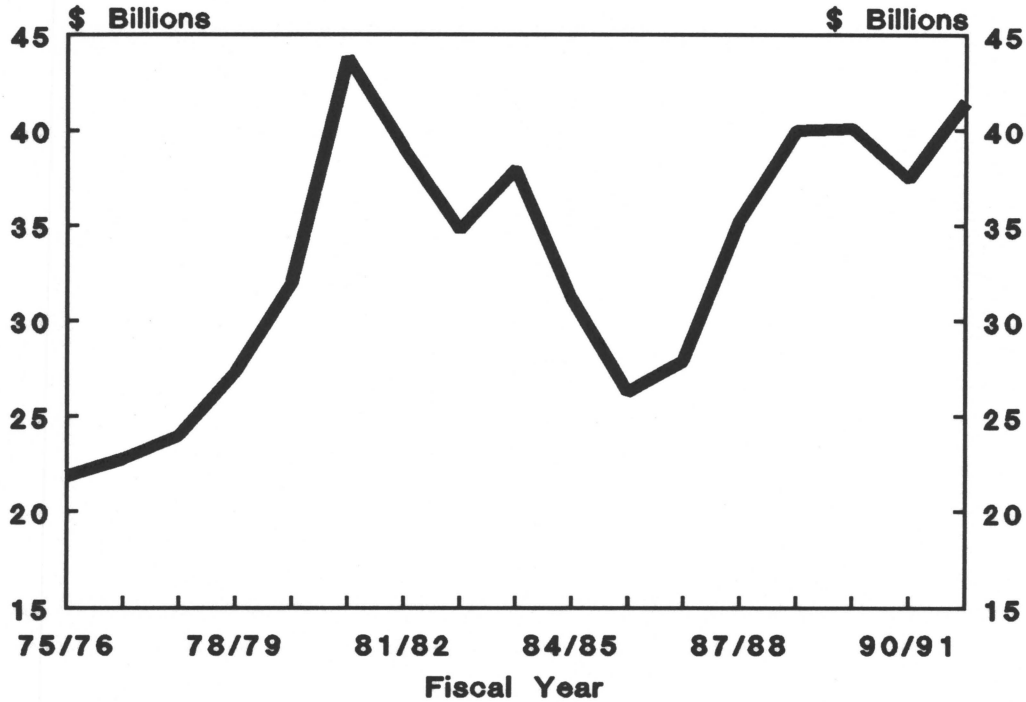
INPUT COST CHANGES

CPI	Up	3%
All Expenses	Up	2%
Fuel	Up	4%
Labor	Up	2%
Seed	No Change	-
Fertilizer	No Change	-
Chemicals	No Change	-
Land	No Change	-

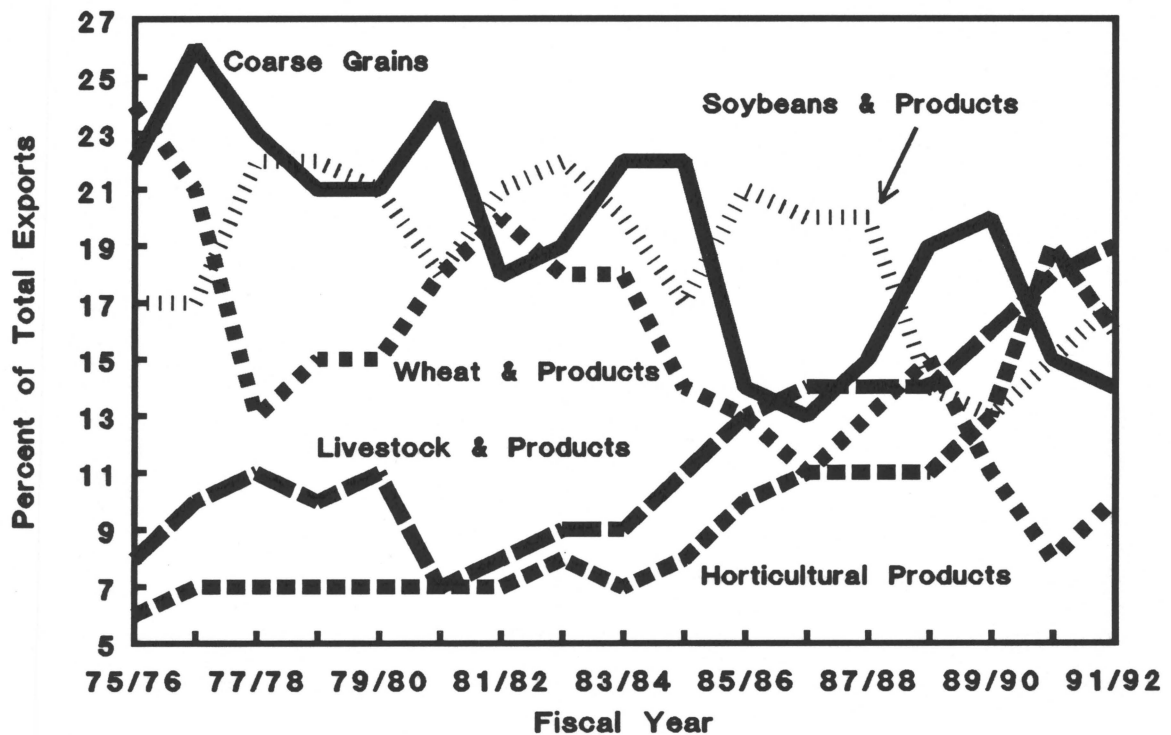
WORLD CRUDE OIL PRICE



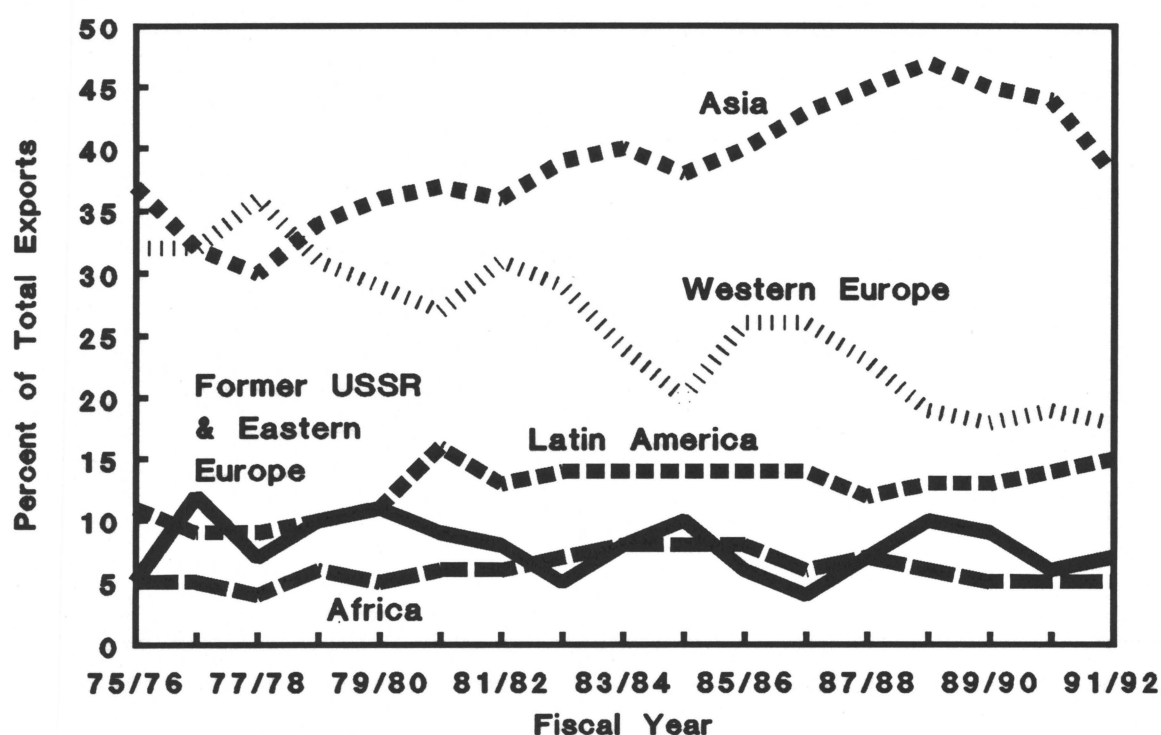
U.S. AGRICULTURAL EXPORTS



U.S. AGRICULTURAL EXPORTS BY COMMODITY GROUP, 1975/76 - 1991/92



U.S. AGRICULTURAL EXPORTS BY WORLD REGION, 1975/76 - 1991/92



MAJOR U.S. EXPORT MARKETS - 1991/92

	<u>Billion Dollars</u>	<u>% Total</u>
Asia	17.4	42
Japan	8.2	20
South Korea	2.2	5
Taiwan	1.9	5
China	.9	2
Western Europe	7.6	18
Latin America	6.4	15
Mexico	3.4	9
Canada	4.8	12
Former USSR	2.7	7
Africa	2.2	5
World	41.5	100

OHIO FARM EXPORTS - 1990/91

15

	\$ Millions	Percent	Rank Among States
Feed Grains and Products	340	33	7
Soybeans and Products	328	32	5
Wheat and Products	97	10	-
Tobacco	14	1	10
Vegetables and Products	51	5	-
Animals and Products	42	4	-
Poultry and Products	20	2	-
Dairy Products	8	1	8
Feeds and Fodder	28	3	-
Other	89	9	-
Total	1,017	100	10

WORLD ECONOMIC GROWTH

	Percent Change in GDP		
	1991	1992	1993
Former Centrally Planned Economies	-9.7	-16.8	-4.5
Developing Countries	3.2	6.2	6.2
Industrial Countries	0.6	1.7	2.9
Japan	4.4	2.0	3.8
Germany	0.9	1.8	2.6
United States	-1.2	1.9	3.1

NAFTA COUNTRY CHARACTERISTICS

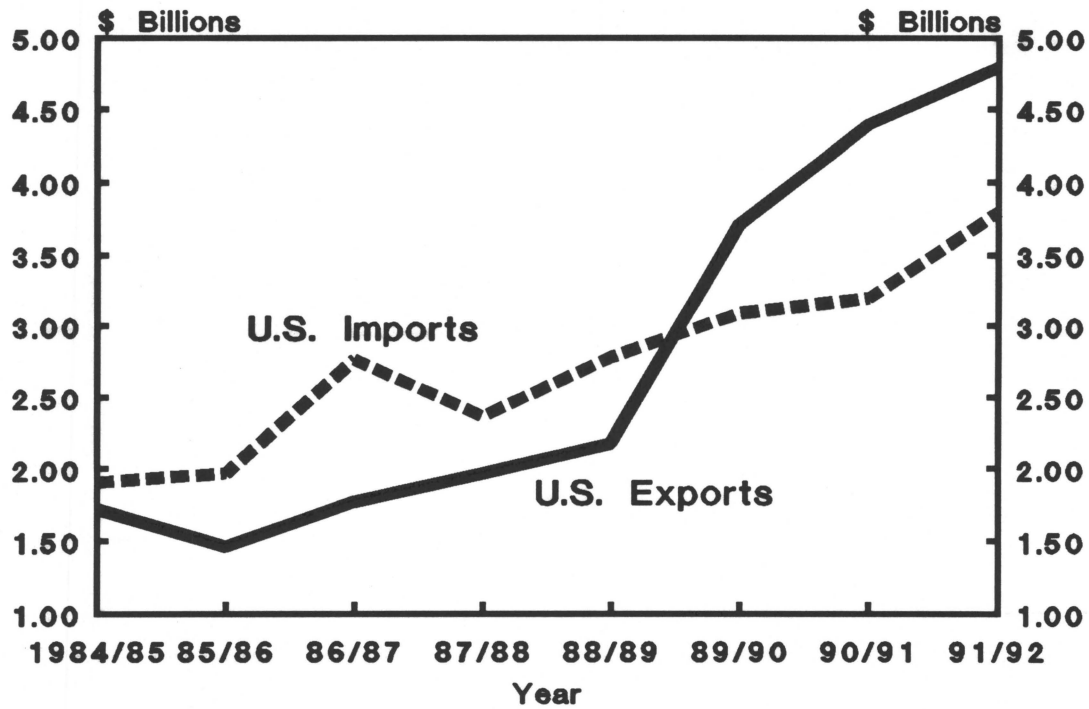
16

	United States	Mexico	Canada
Border (miles)	-	2000	4000 (+1500 Alaska)
Population (millions)	254	90	27
GNP/capita	\$22,000	\$2,500	\$20,000
Consumption/capita (tons cereal equiv.)	2.2	1.0	2.0
Arable Land/capita (acres)	1.8	0.6	4.2
Grain Productivity (tons/acre)	2.0	1.1	1.1

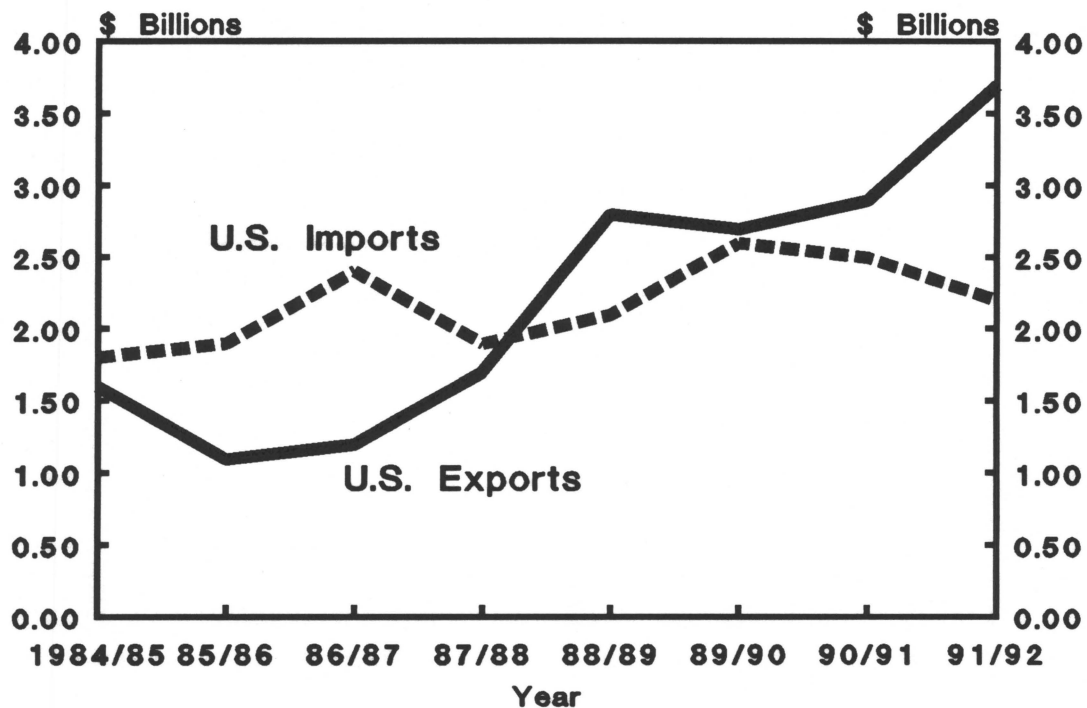
NAFTA: NON-AGRICULTURAL CONDITIONS

	United States	Mexico
Import Tariffs on Manufactured Goods	4%	10%
Hourly Wage Costs	\$15.45	\$2.17
Gross Domestic Product (GDP)	\$4,900 bil.	\$209 bil.

U.S. - CANADA AGRICULTURAL TRADE



U.S. - MEXICO AGRICULTURAL TRADE



U.S. NORTH AMERICAN AGRICULTURAL TRADE MARKET, 1991/92

	Canada		Mexico	
	Exports To	Imports From	Exports To	Imports From
Trade value (Bil. \$)	\$ 4.8	\$ 3.8	\$ 3.7	\$ 2.2

Trade composition (%)

Livestock	19	45	37	17
Grains	13	18	29	2
Oilseeds	7	8	16	2
Horticulture	57	23	6	73
Other	4	6	12	6

NAFTA: PROJECTED CHANGES IN U.S. EXPORTS TO MEXICO AFTER 15 YEARS - NAFTA VERSUS NO NAFTA

Commodity	Export Changes	Added Annual Revenues (million dollars)
Wheat	+40%	30
Corn	+50%	400-450
Soybeans	+20%	400-500
Pork	+100%	150-200
Beef		200-400

ETHANOL PRODUCTION AND CAPACITY

	Distilleries (Number)	Capacity (bil. gal.)	Annual Production (bil. gal.)	Corn (mil. bu.)
1980's	36	1.00	.85	340
1991	36	1.16	1.00	400
1992	36	1.16	1.06	423
1994?	(60)	1.80	1.8 - 2.0	720 - 800

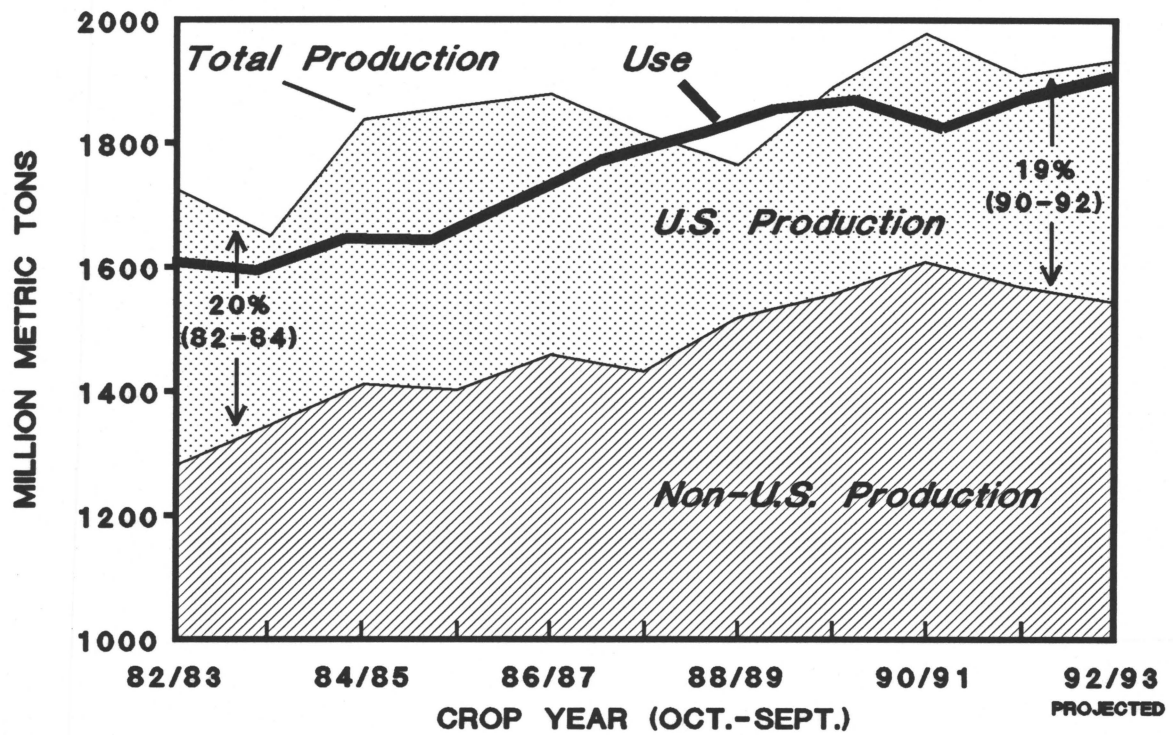
GRAINS AND OILSEEDS OUTLOOK

Discussion-Aids Prepared by

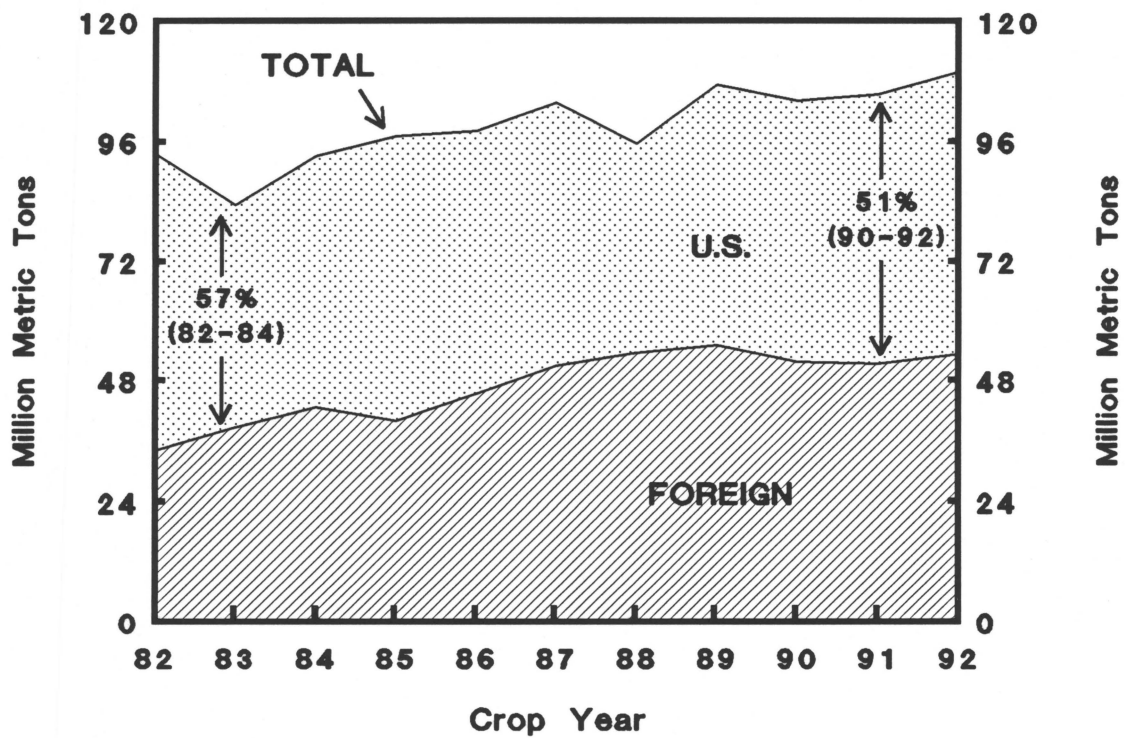
Allan Lines

WORLD GRAIN AND OILSEED PRODUCTION AND USE

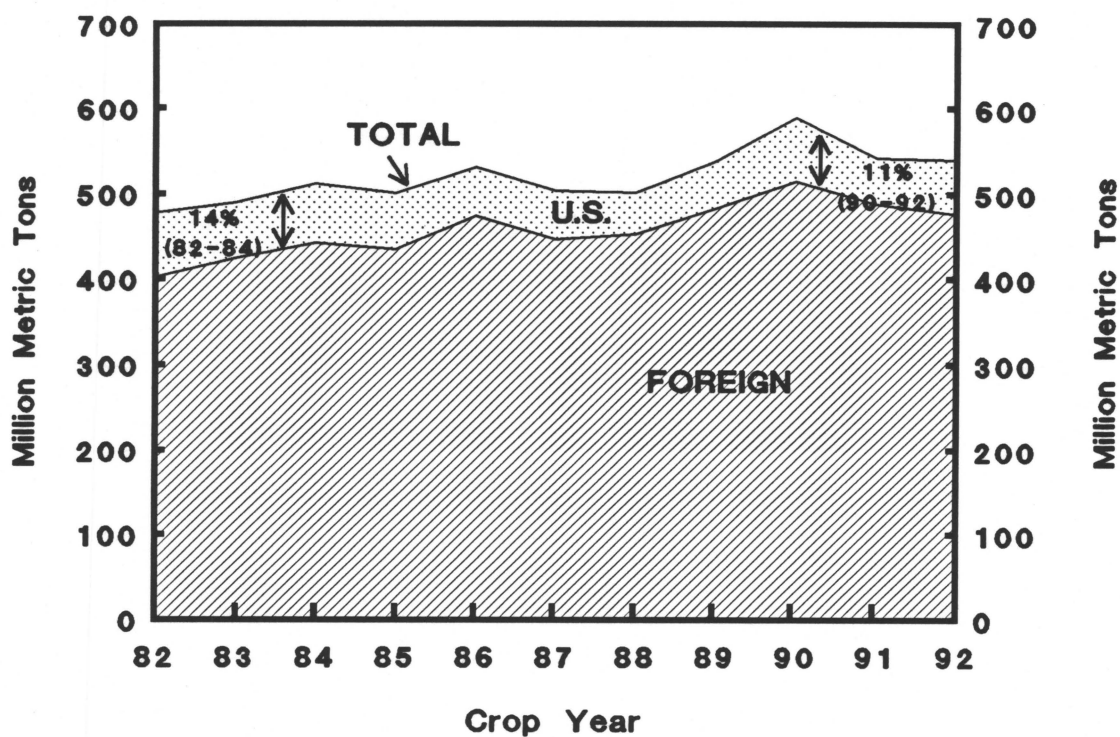
21



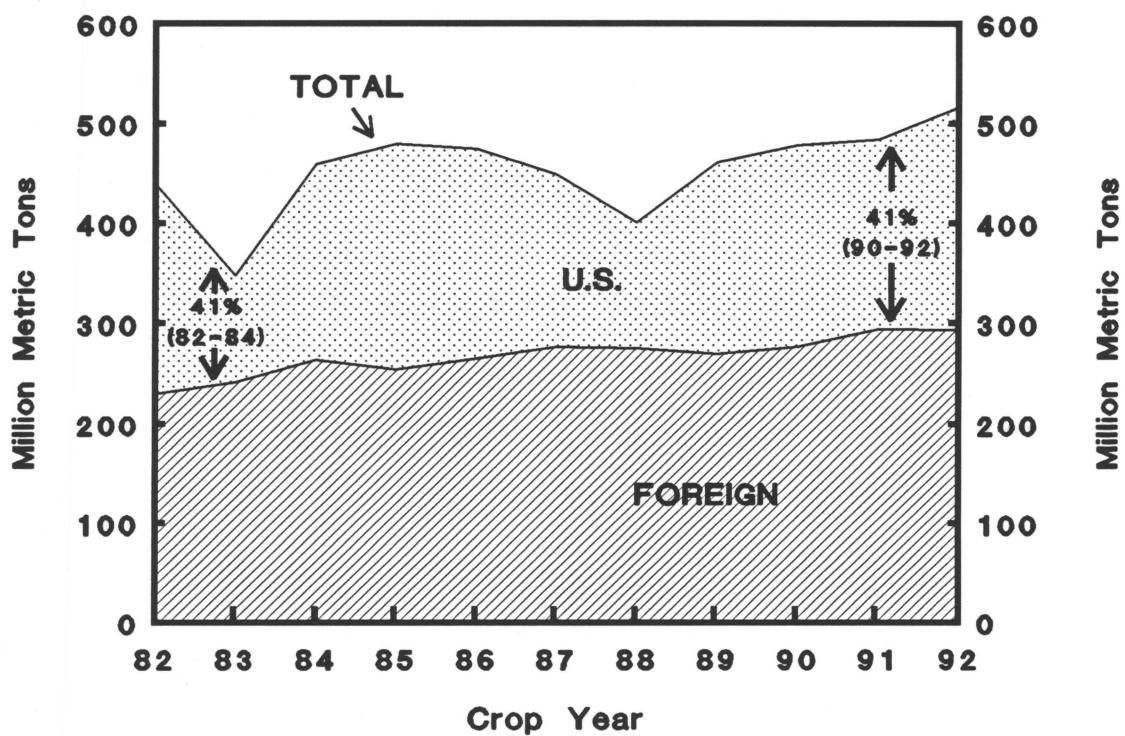
WORLD SOYBEAN PRODUCTION



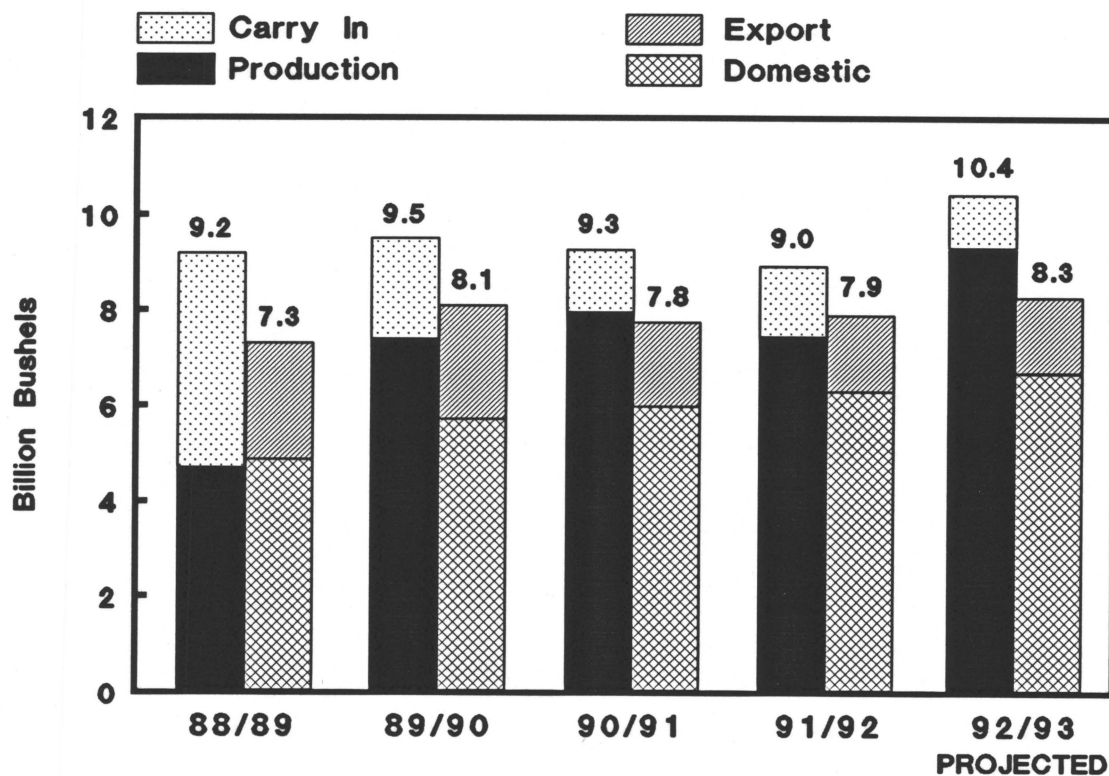
WORLD WHEAT PRODUCTION



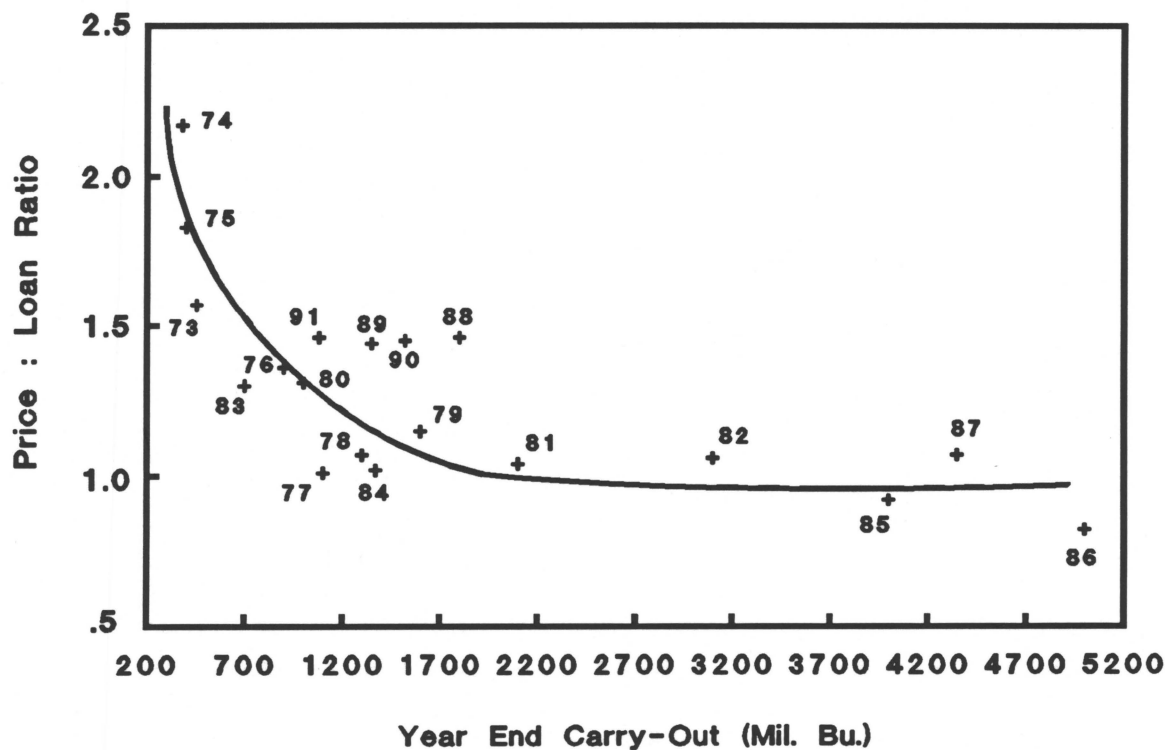
WORLD CORN PRODUCTION



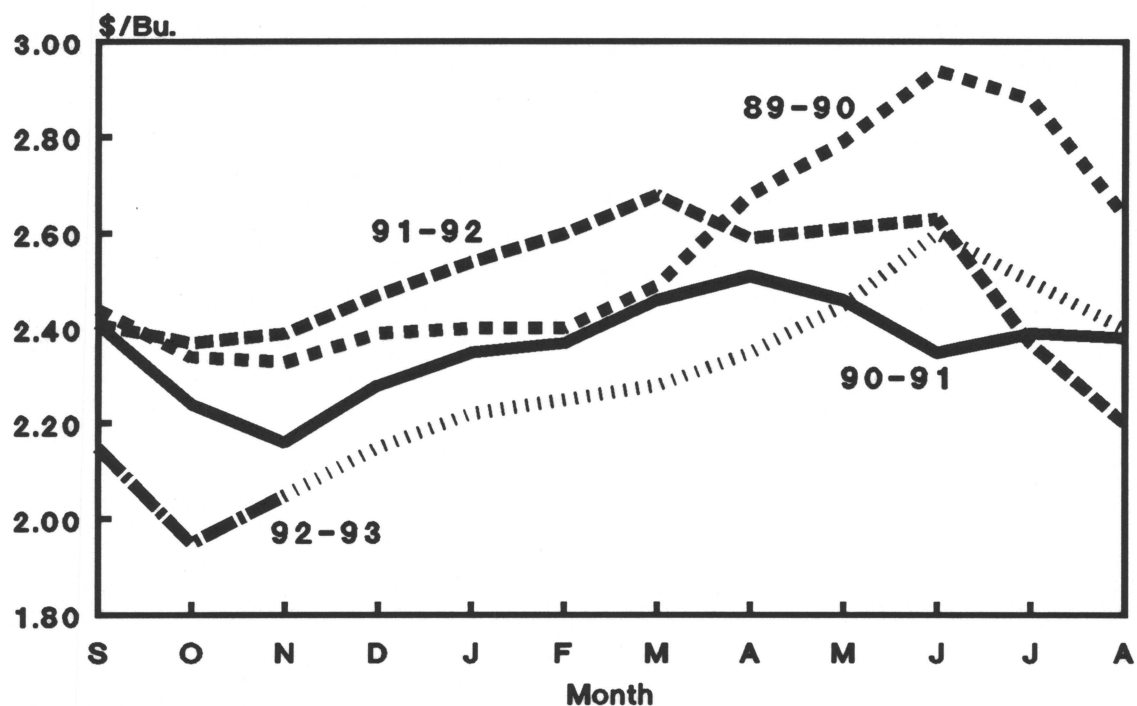
CORN: SUPPLY AND USE



CORN: STOCKS-PRICE RELATIONSHIP

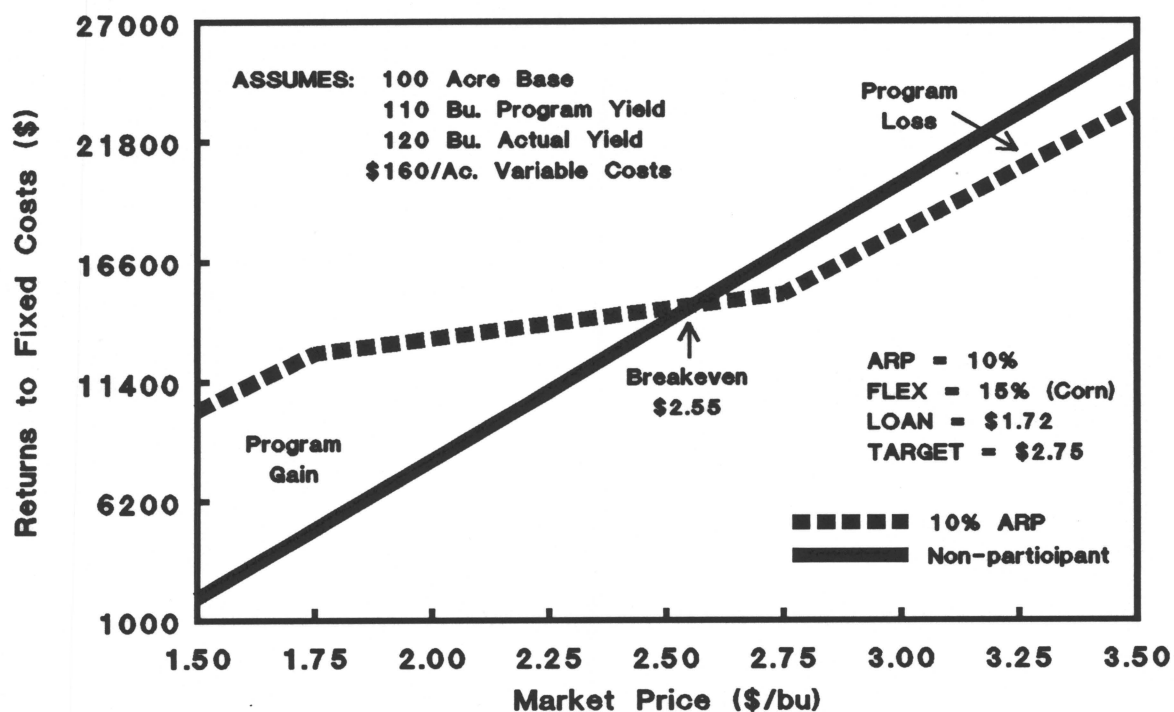


CORN: OHIO AVERAGE FARM PRICES

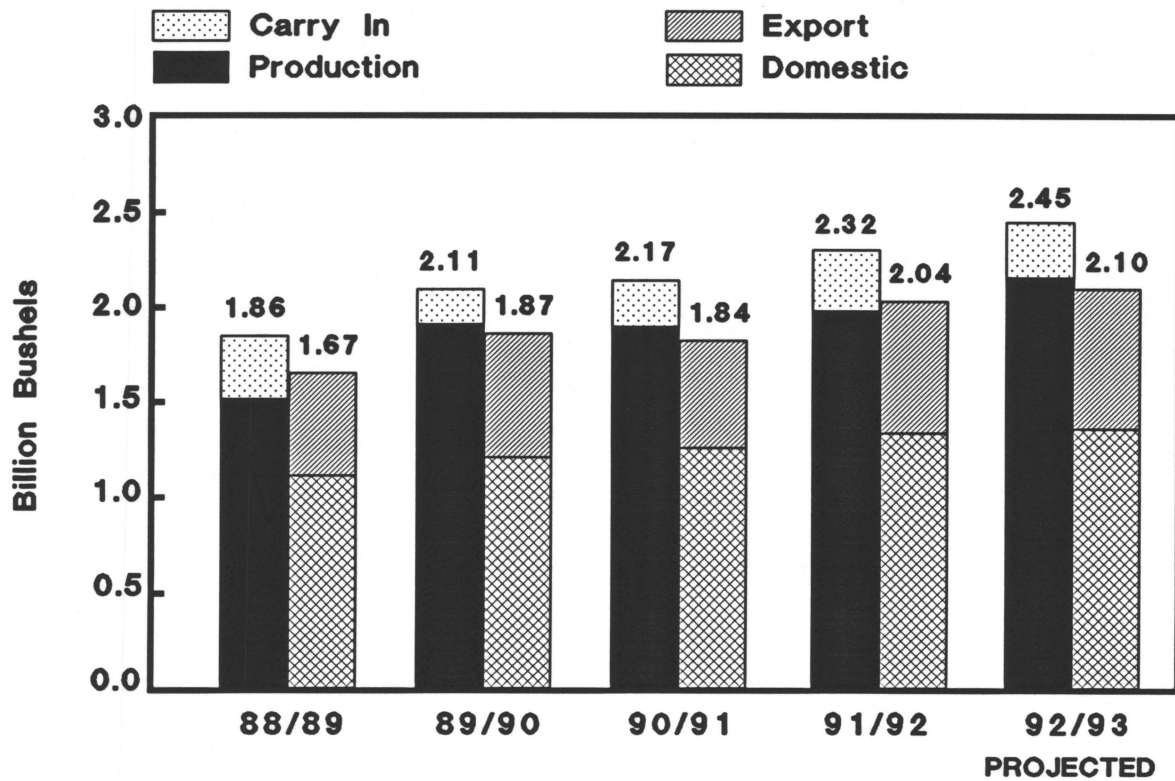


92-93 Nov-Aug Projected

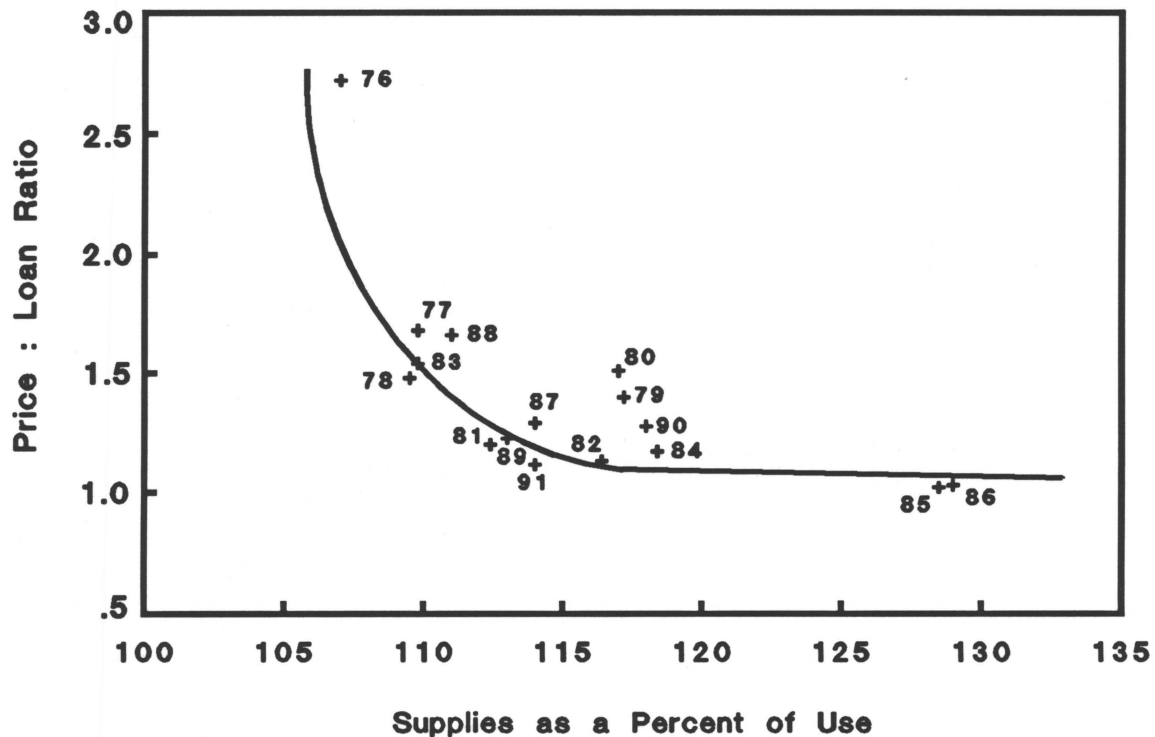
1993 CORN PROGRAM



SOYBEANS: SUPPLY AND USE



SOYBEANS: STOCKS-PRICE RELATIONSHIP

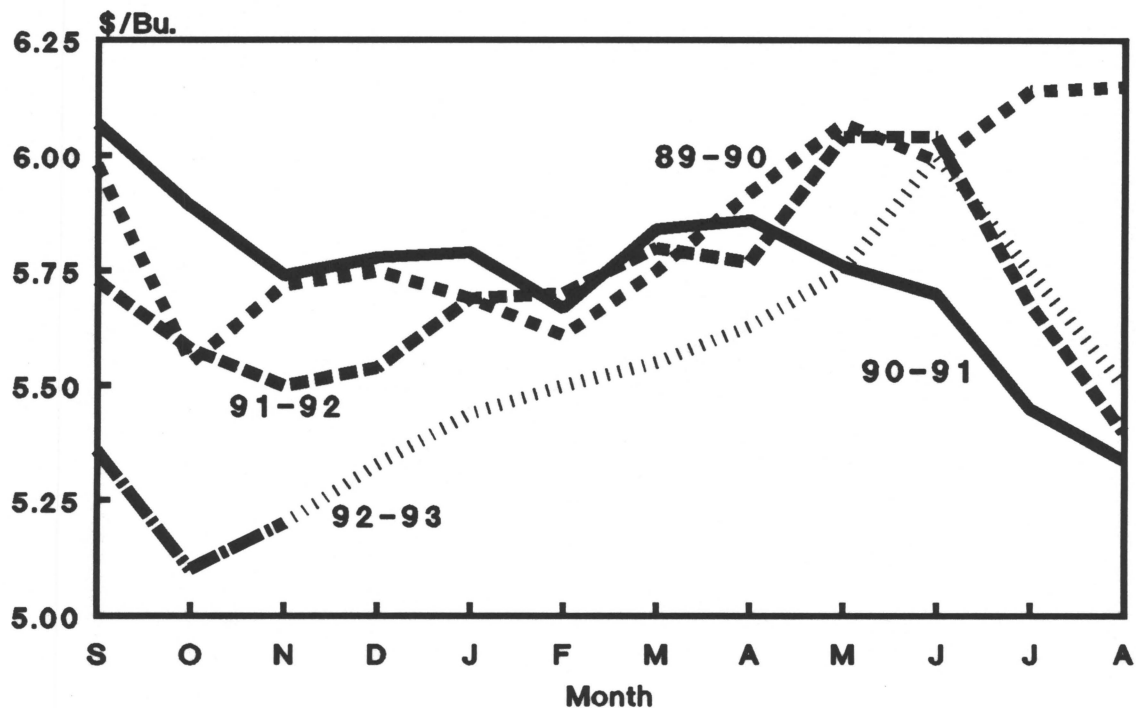


1992-93 SOYBEAN PRICE PROSPECTS (Decatur, IL)

	Per Bu.	Price	Value
Meal (Ton)	47.5 #	\$160-180	\$3.80 to 4.28
Oil (Lb.)	11.0 #	\$0.18-0.20	\$1.98 to 2.20
Total			\$5.78 to 6.48

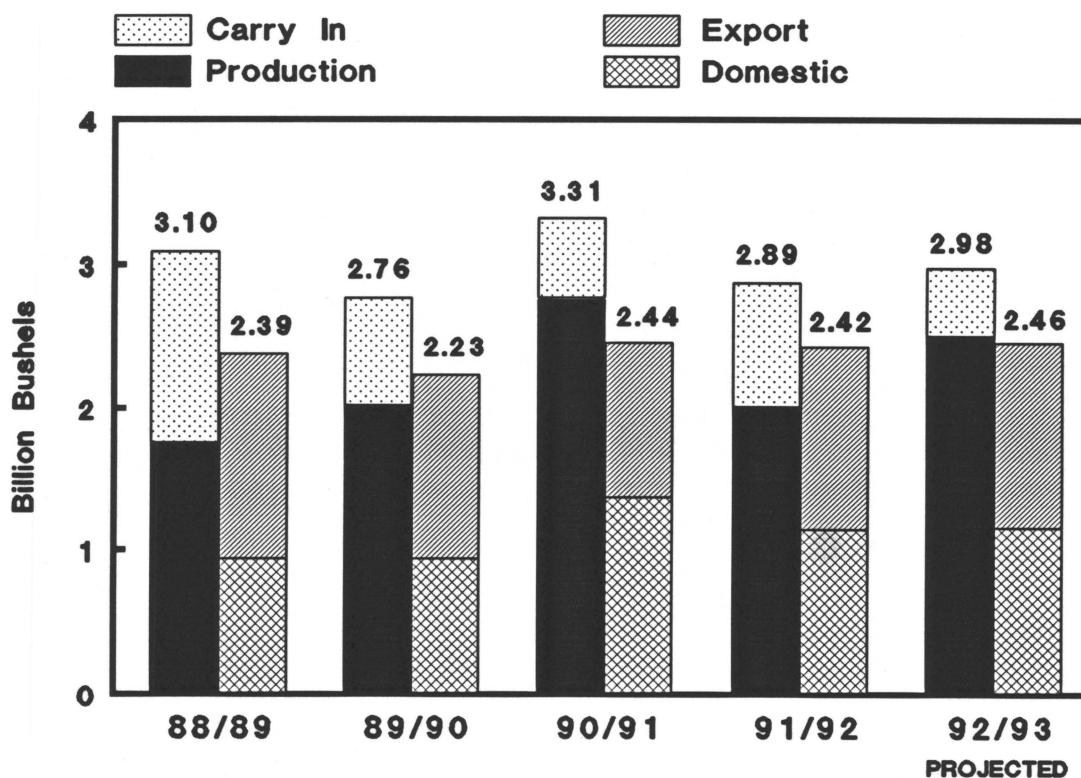
Minus Crushing Margins

SOYBEANS: OHIO AVERAGE FARM PRICES

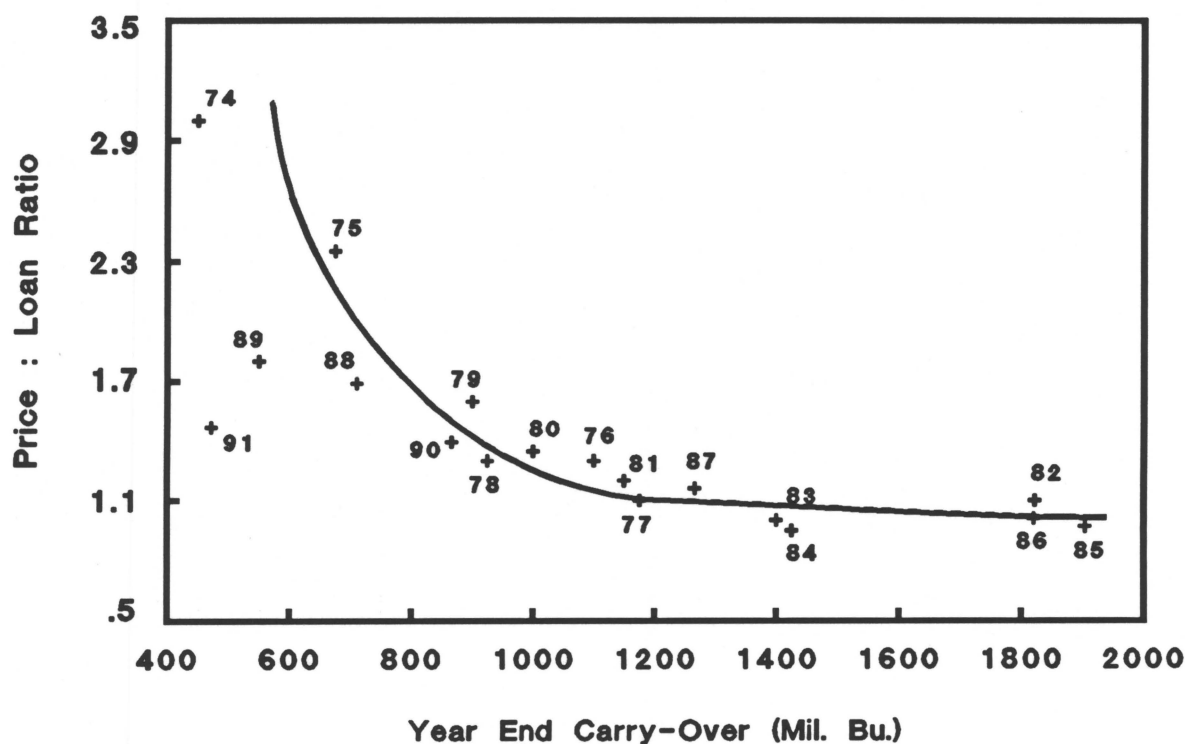


92-93 Nov-Aug Projected

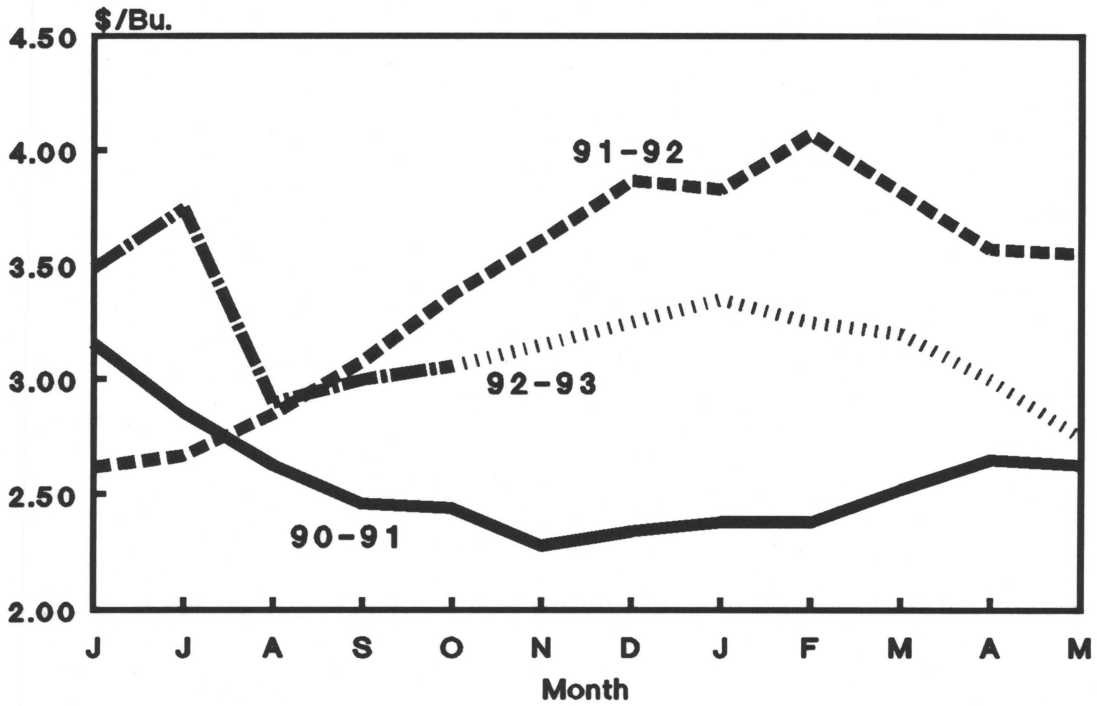
WHEAT: SUPPLY AND USE



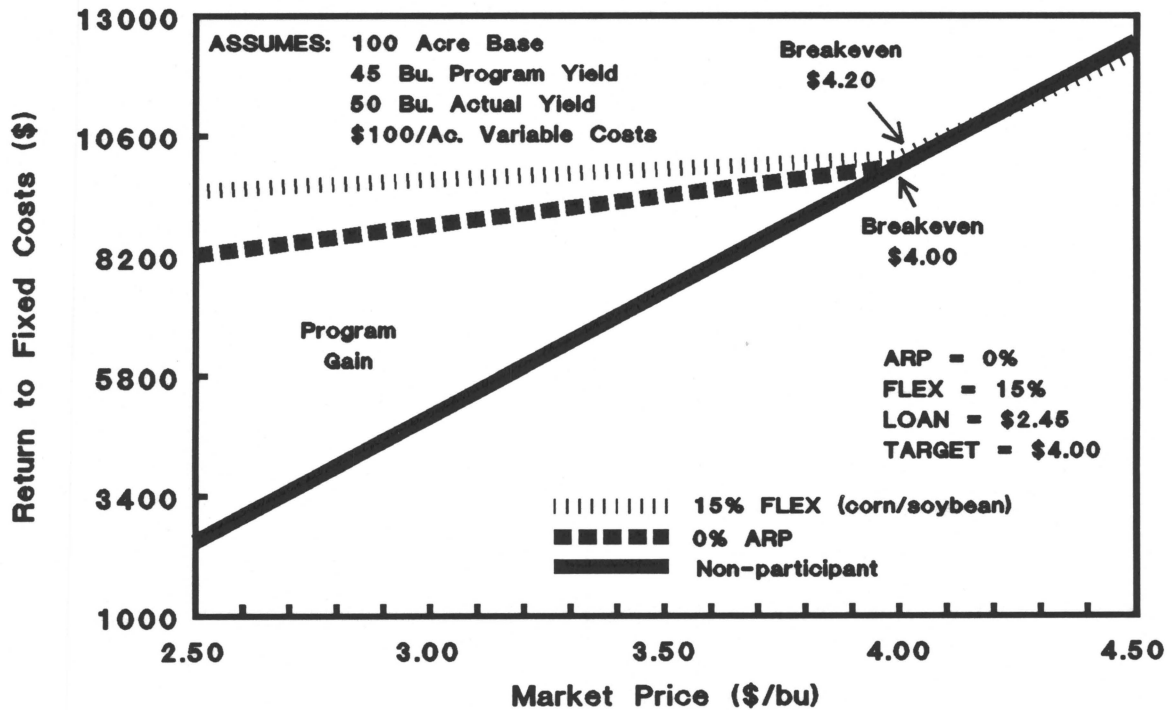
WHEAT: STOCKS-PRICE RELATIONSHIP



WHEAT: OHIO AVERAGE FARM PRICES



1993 WHEAT PROGRAM



1993 FLEX ACRES ECONOMICS

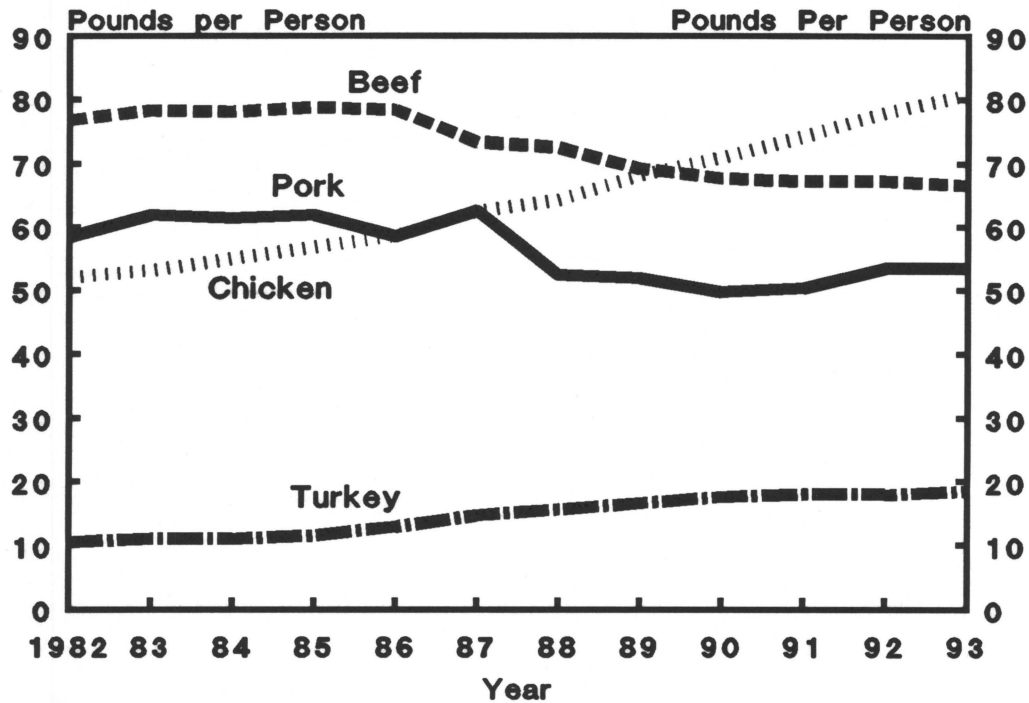
per acre	Corn	Soybeans	Wheat	Oats	Canola
Yield (bu.)	120	40	50	75	40
Market Price (\$/bu.)	2.25	5.50	3.00	1.40	5.00
Market Returns (\$)	270	220	150	105	200
Variable Costs (\$)	160	110	100	70	100
Market Returns to Fixed Costs (\$)	110	110	50	35	100

LIVESTOCK OUTLOOK

Discussion-Aids Prepared by

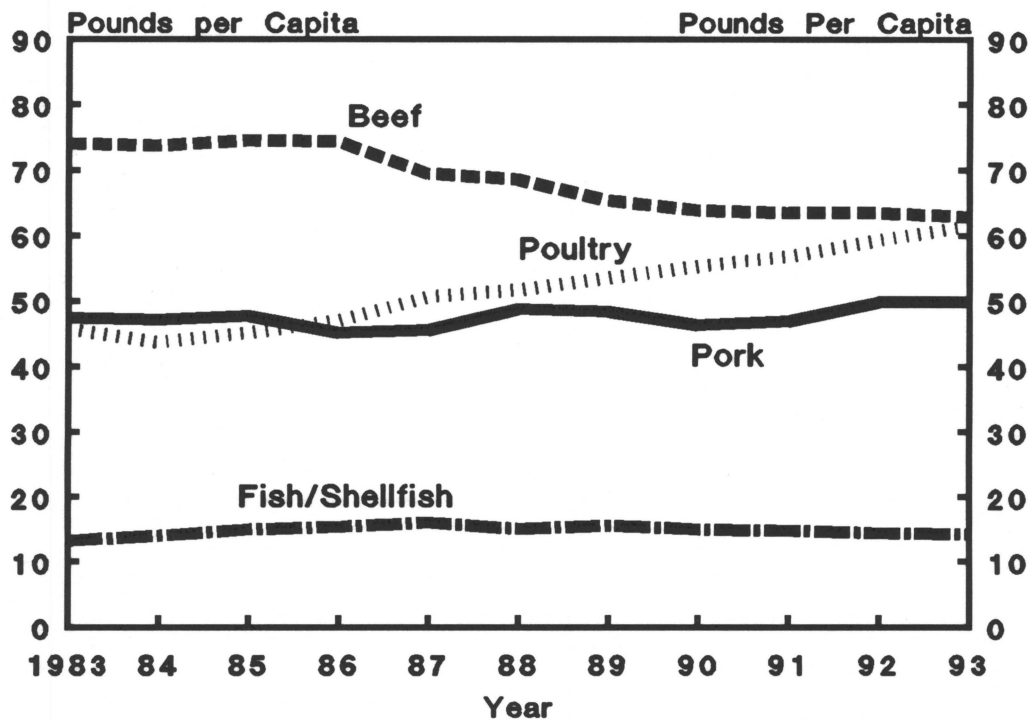
Allan Lines
Gary Schnitkey

MEAT CONSUMPTION IN THE U.S.



1992/1993 Estimated/Projected

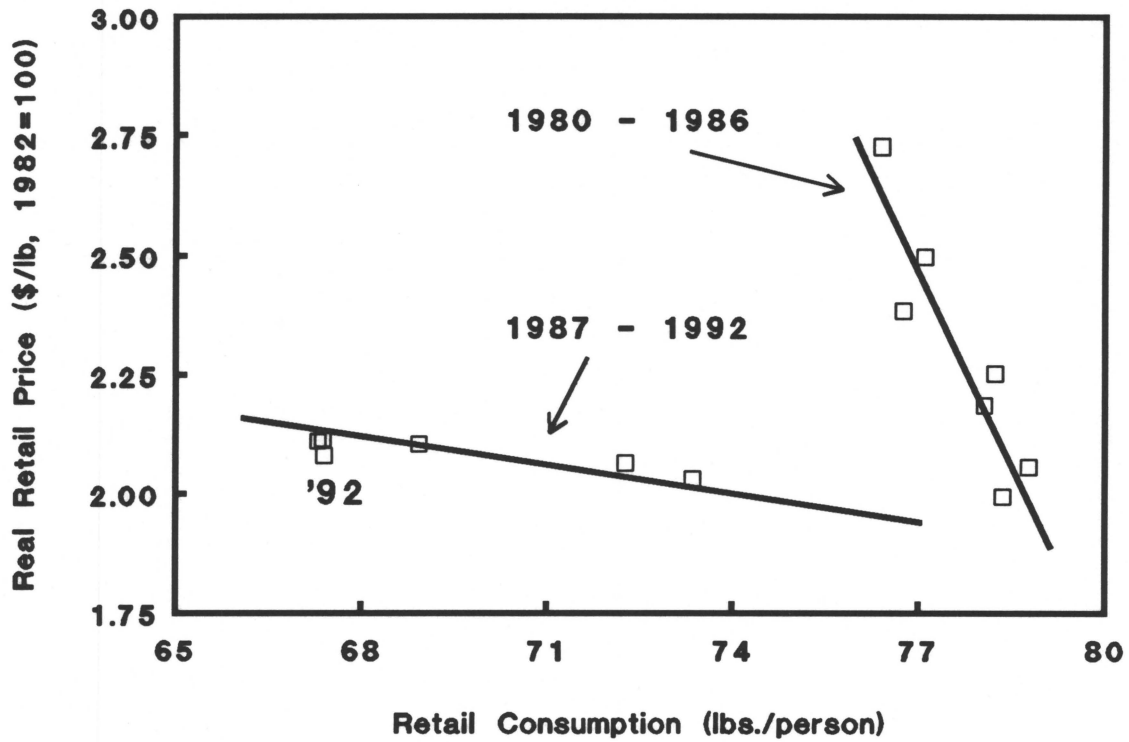
U.S. MEAT, POULTRY AND FISH CONSUMPTION RETAIL BONELESS TRIMMED WEIGHT



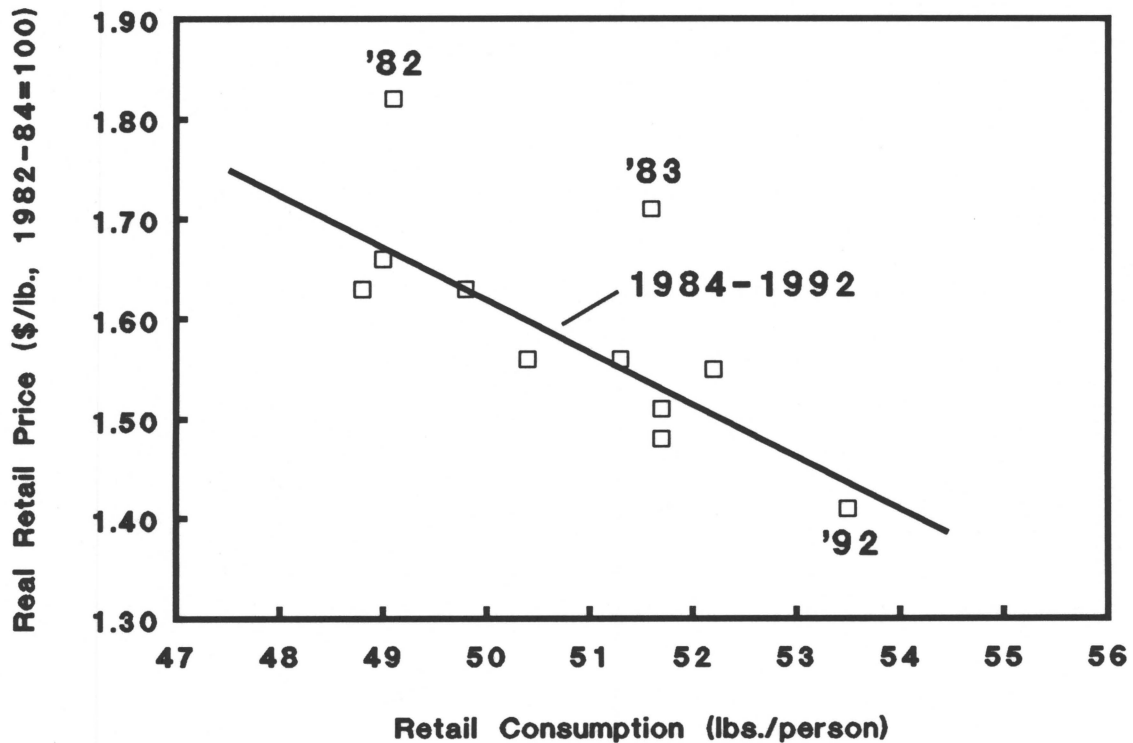
1992/1993 Estimated/Projected

DEMAND FOR BEEF IN THE U.S.

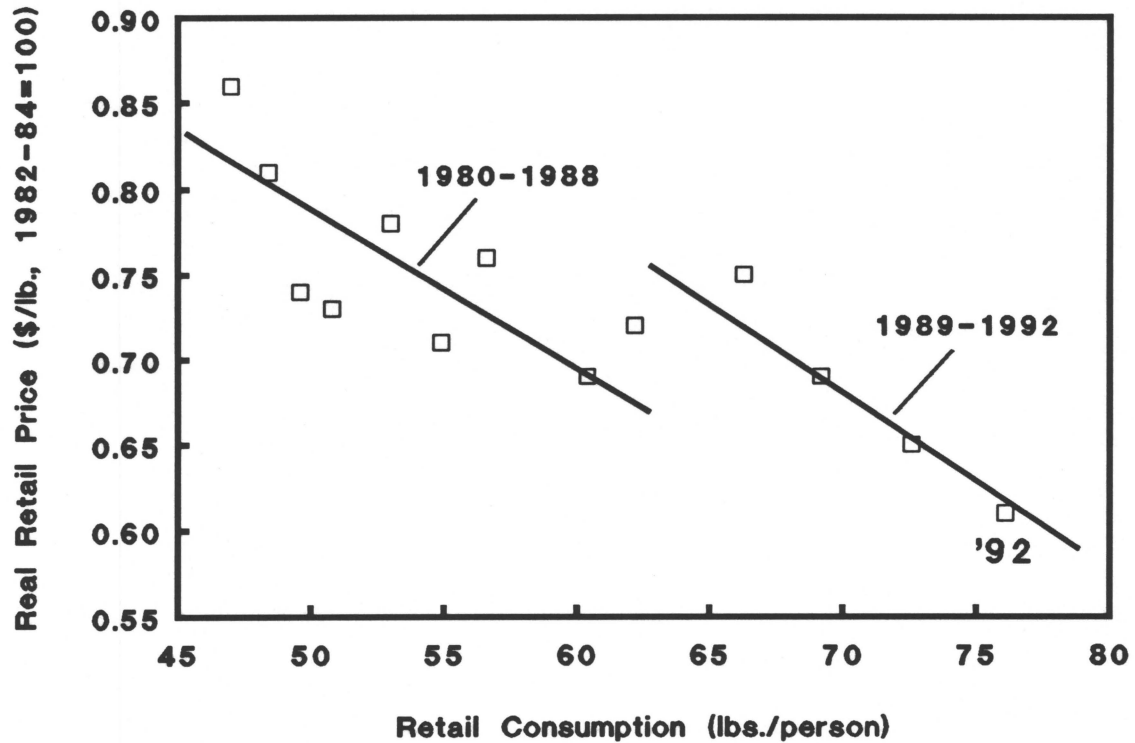
32



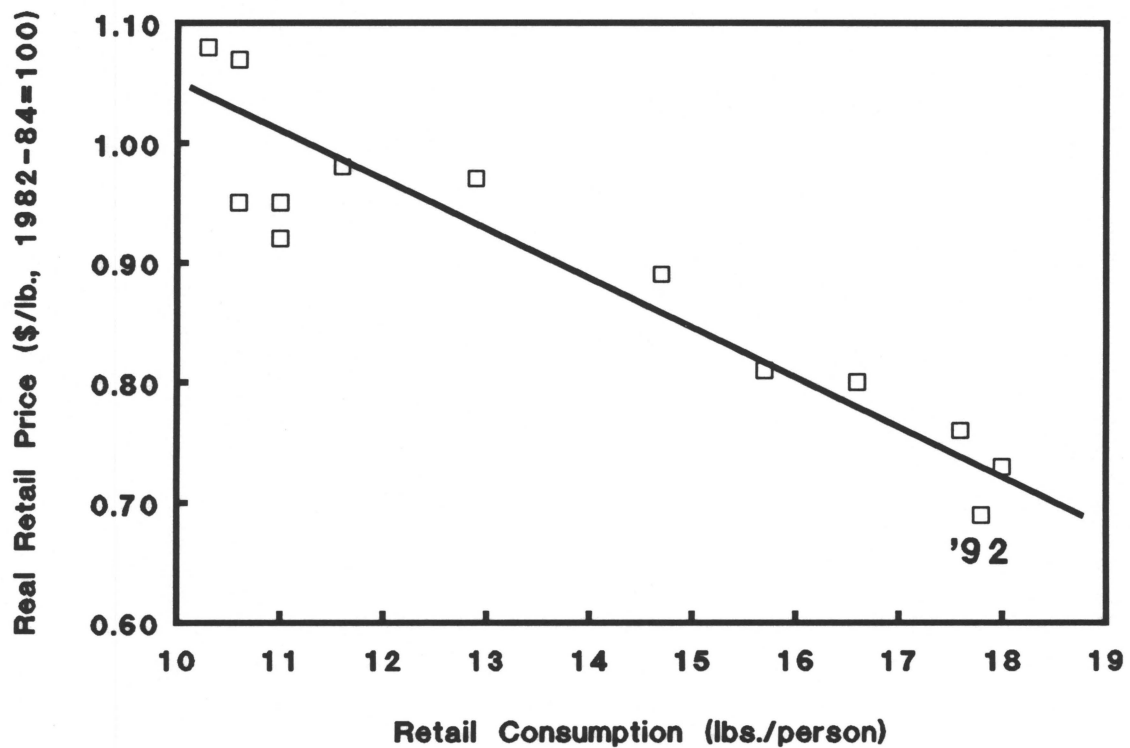
DEMAND FOR PORK IN THE U.S.



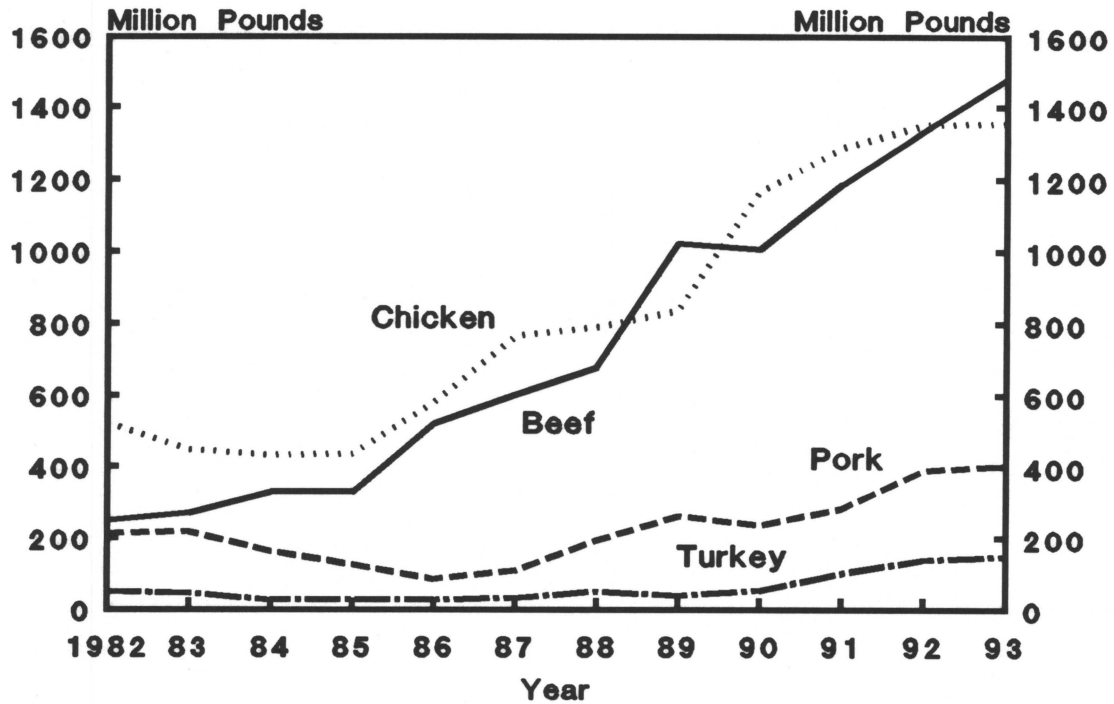
DEMAND FOR BROILERS IN THE U.S.



DEMAND FOR TURKEY IN THE U.S.

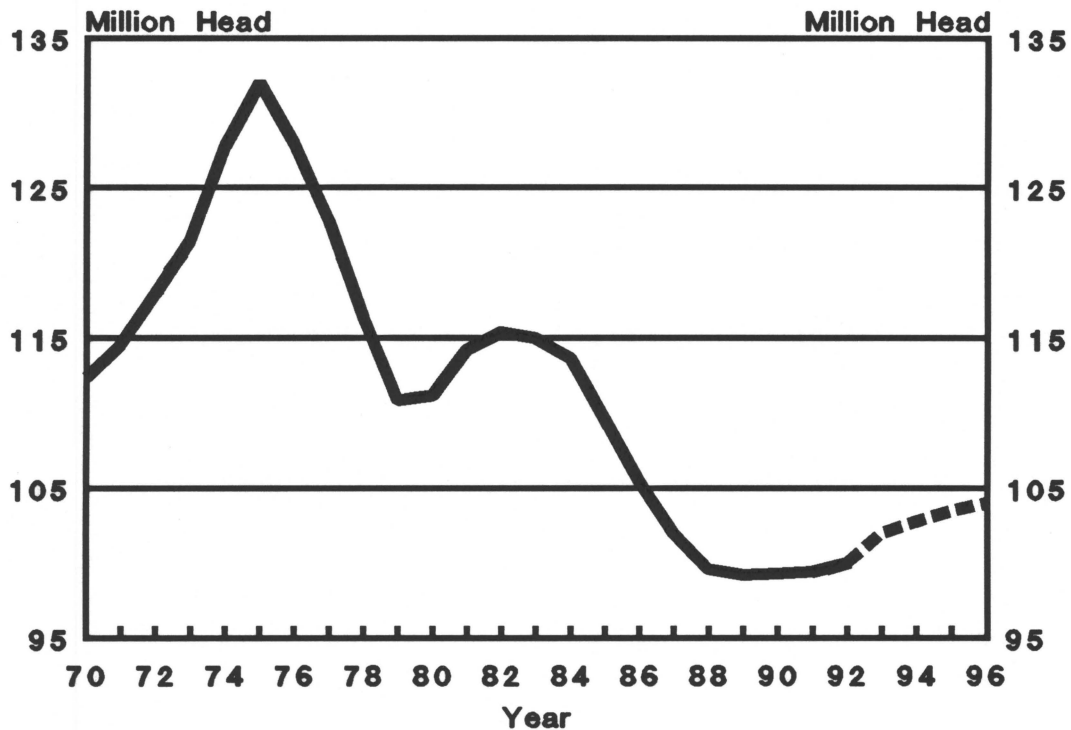


U.S. MEAT EXPORTS



1992/1993 Estimated/Projected

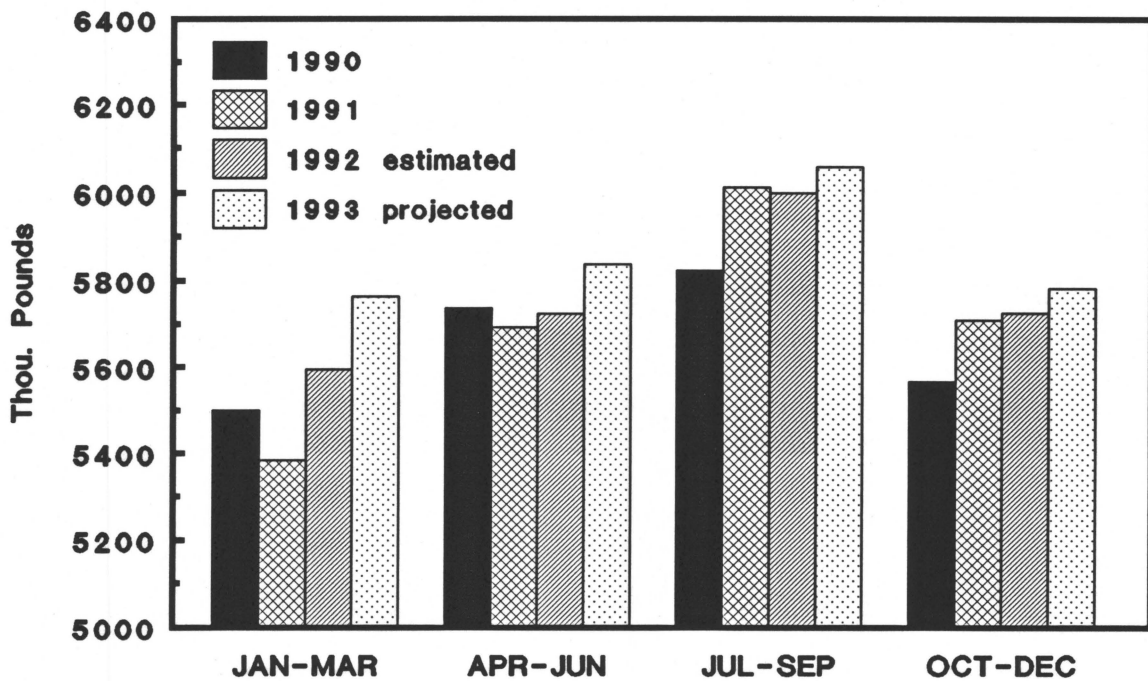
U.S. INVENTORY OF ALL CATTLE AND CALVES, January 1



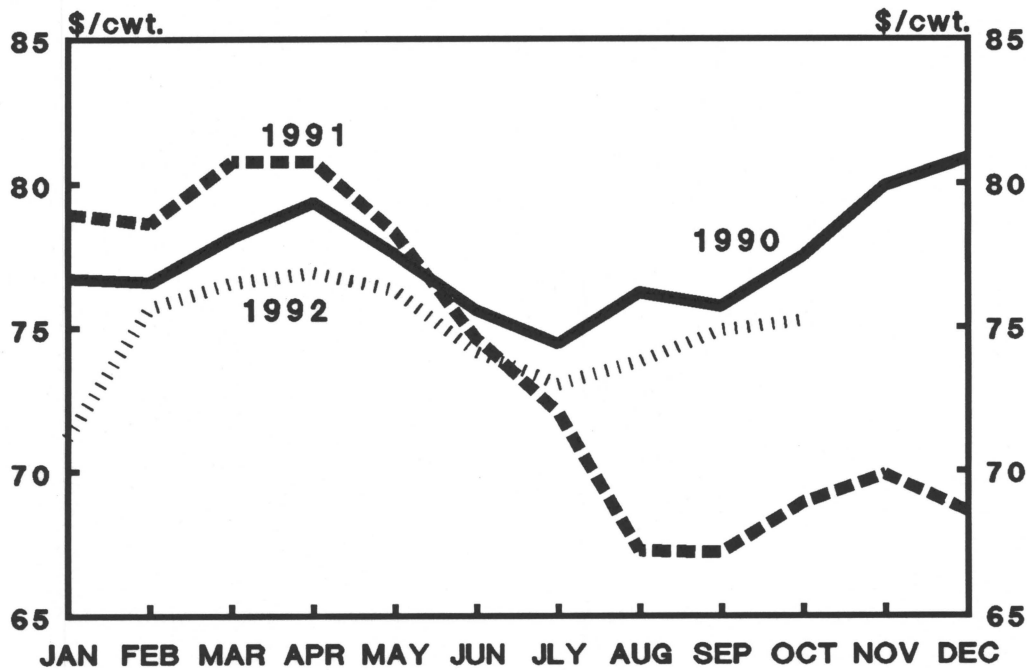
1993-96 Projected

COMMERCIAL BEEF PRODUCTION QUARTERLY

35
(Revised 11/92)



FED CATTLE PRICE, OMAHA CHOICE, 1000-1100 LBS.

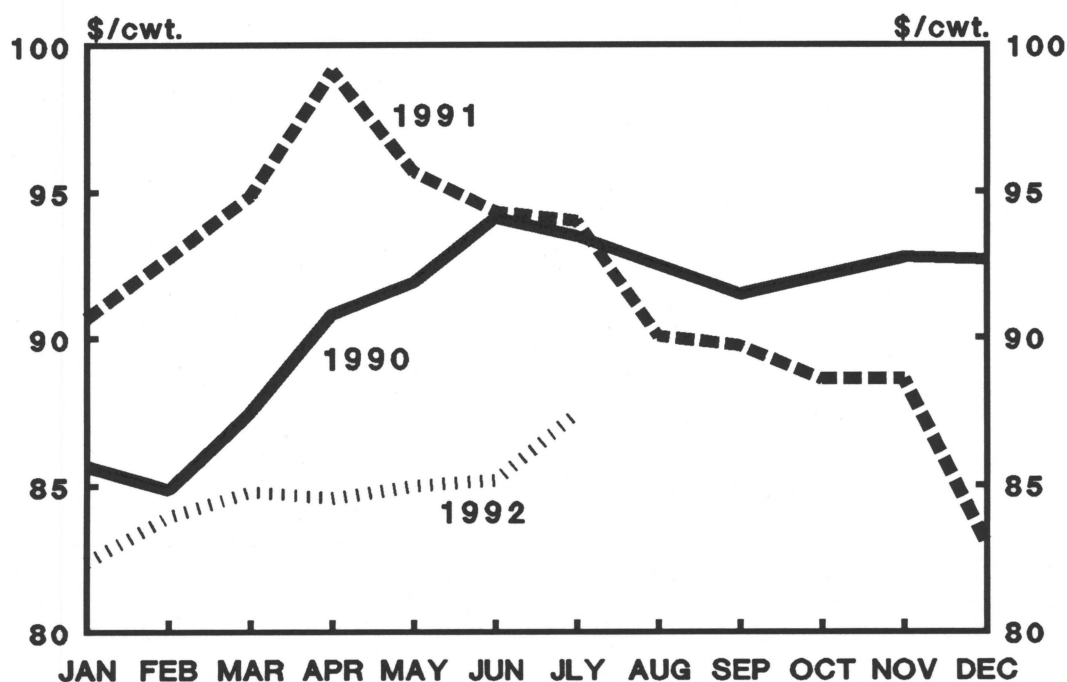


FORECASTS

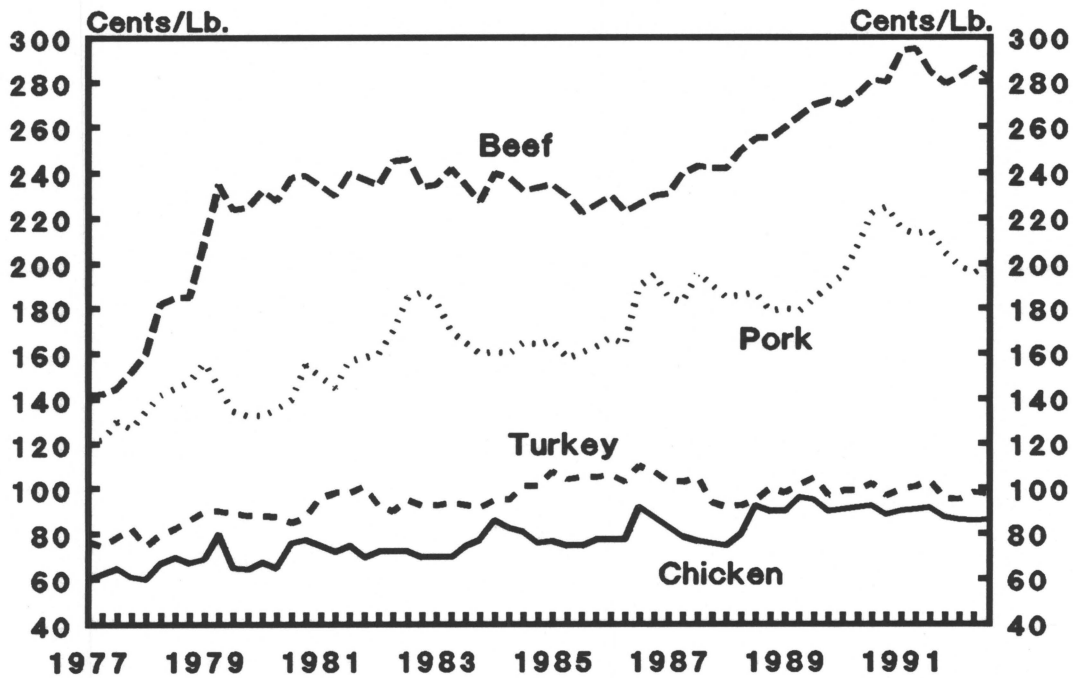
36
(Revised 11/1/92)

	Beef Production	Fat Cattle Price/cwt
1992		
IV	N/C	\$73-75
Year	+ 1%	\$74-76
1993		
I	+ 3%	\$70-73
II	+ 2%	\$72-75
III	+ 1%	\$70-73
IV	+ 1%	\$69-72
Year	+ 2%	\$70-73

FEEDER STEER PRICE, OKLAHOMA MEDIUM FRAME NO. 1, 600 - 700 LBS.

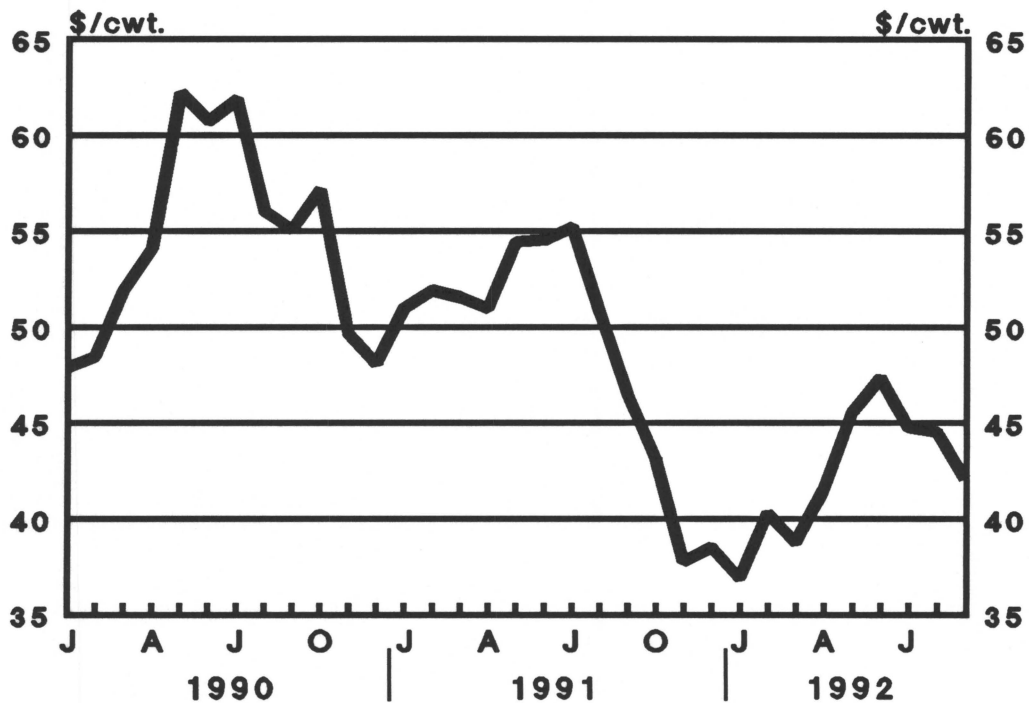


RETAIL MEAT PRICES QUARTERLY AVERAGE



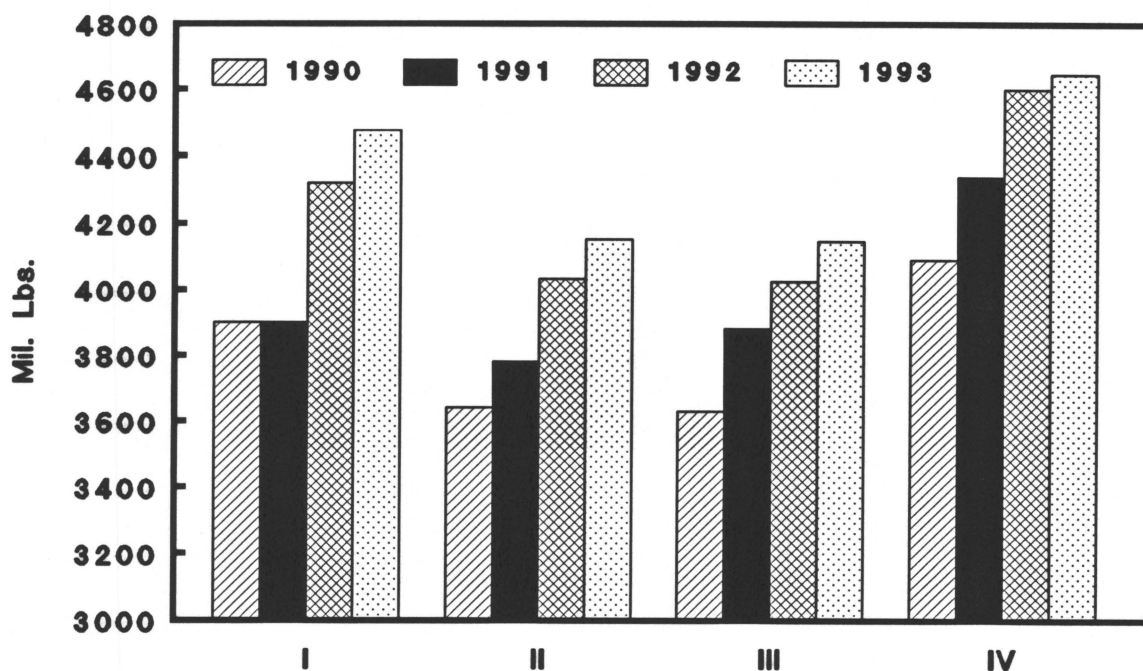
Last date: July - Sept. 1992

BARROW AND GILT PRICE 6 MARKET AVERAGE

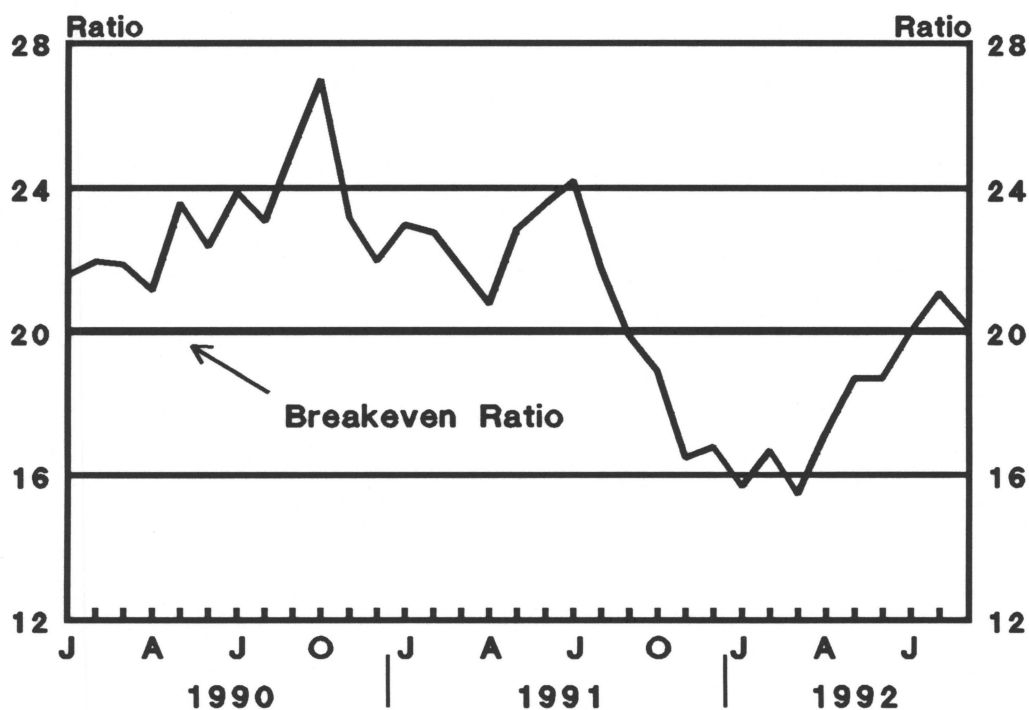


COMMERCIAL PORK PRODUCTION

U.S. QUARTERLY

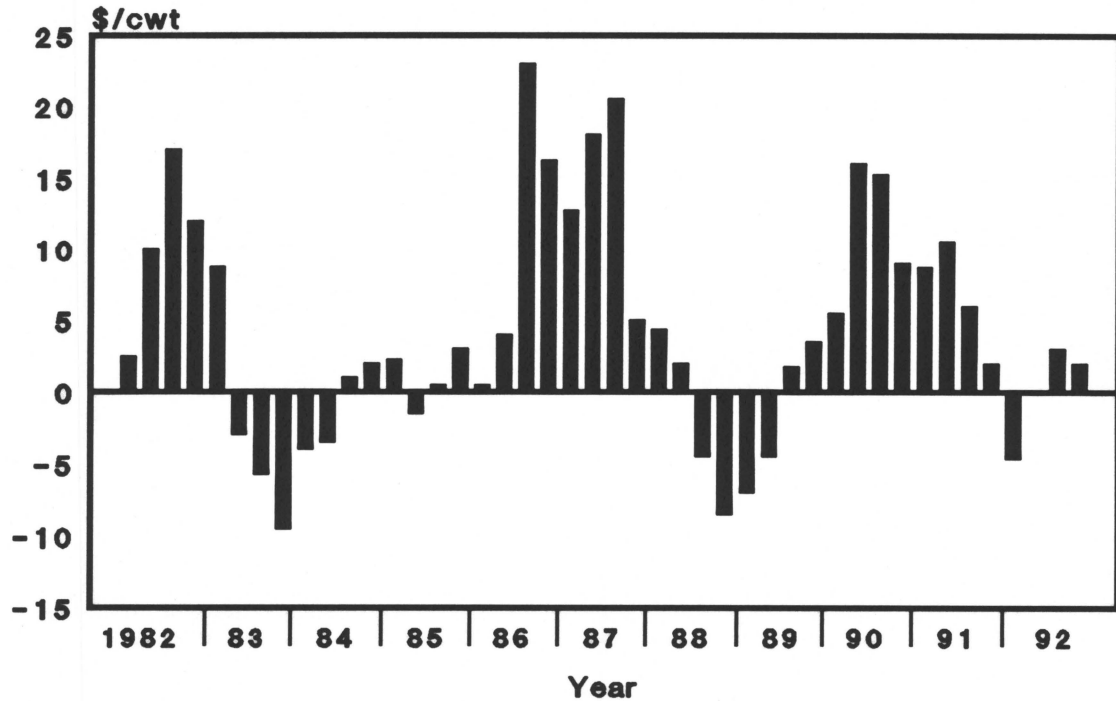


HOG-CORN PRICE RATIO, OMAHA



ESTIMATED FARROW-TO-FINISH RETURNS

39

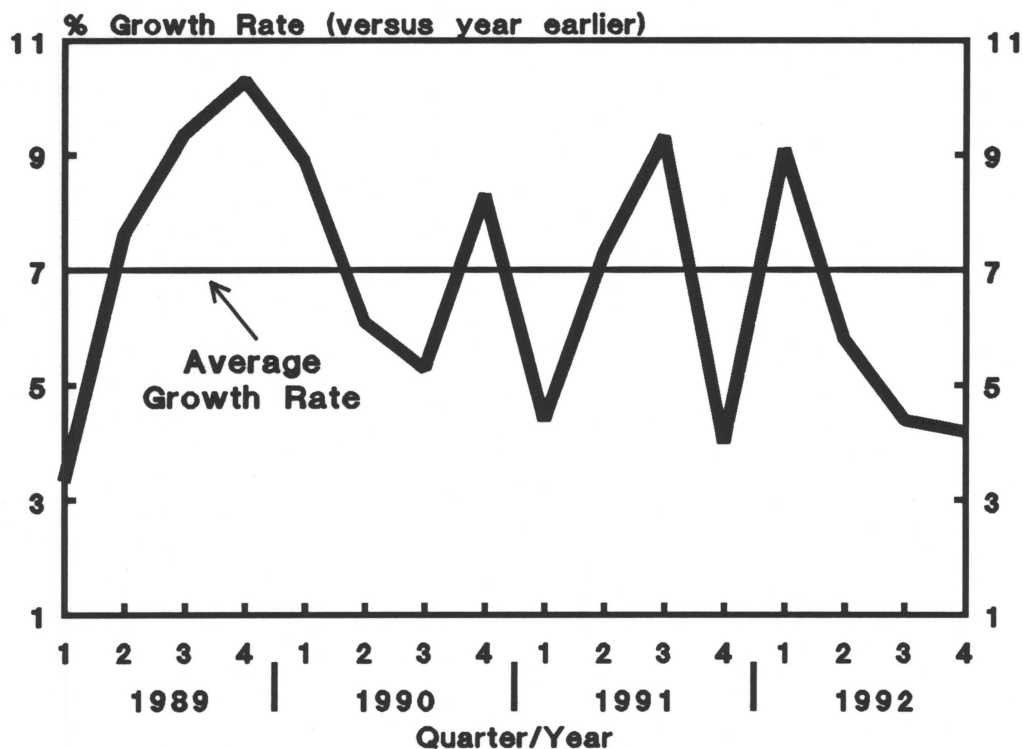


FORECASTS

	Pork Production	Barrow & Gilt Price/cwt
1992		
IV	+ 4%	\$38-40
Year	+ 8%	\$41-42
1993		
I	+ 4%	\$37-40
II	+ 3%	\$39-42
III	+ 3%	\$38-41
IV	+ 1%	\$37-40
Year	+ 3%	\$38-41

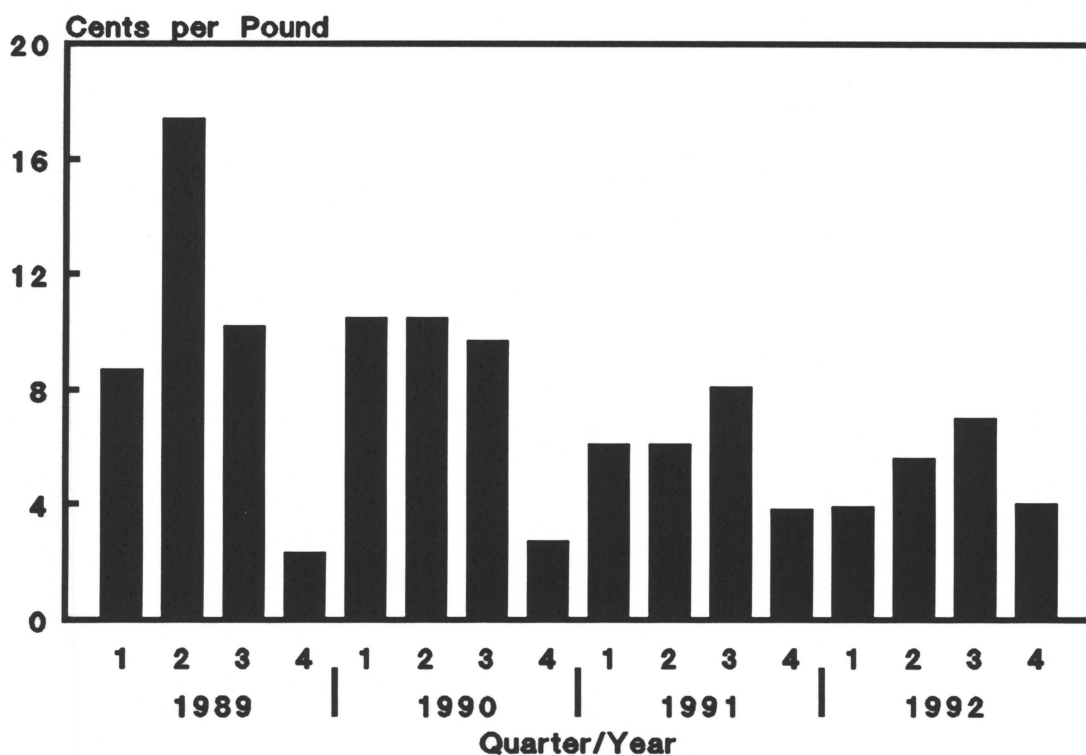
GROWTH OF BROILER PRODUCTION IN THE U.S.

40



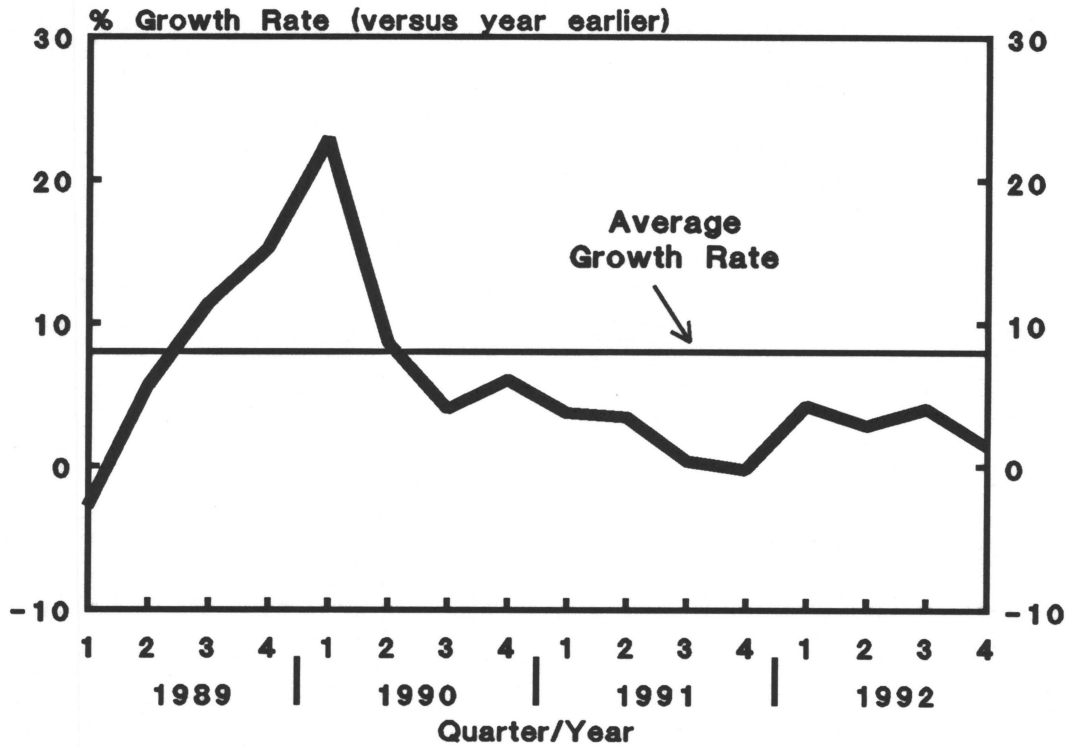
1992/3-4 Estimated

BROILER PRODUCTION RETURN



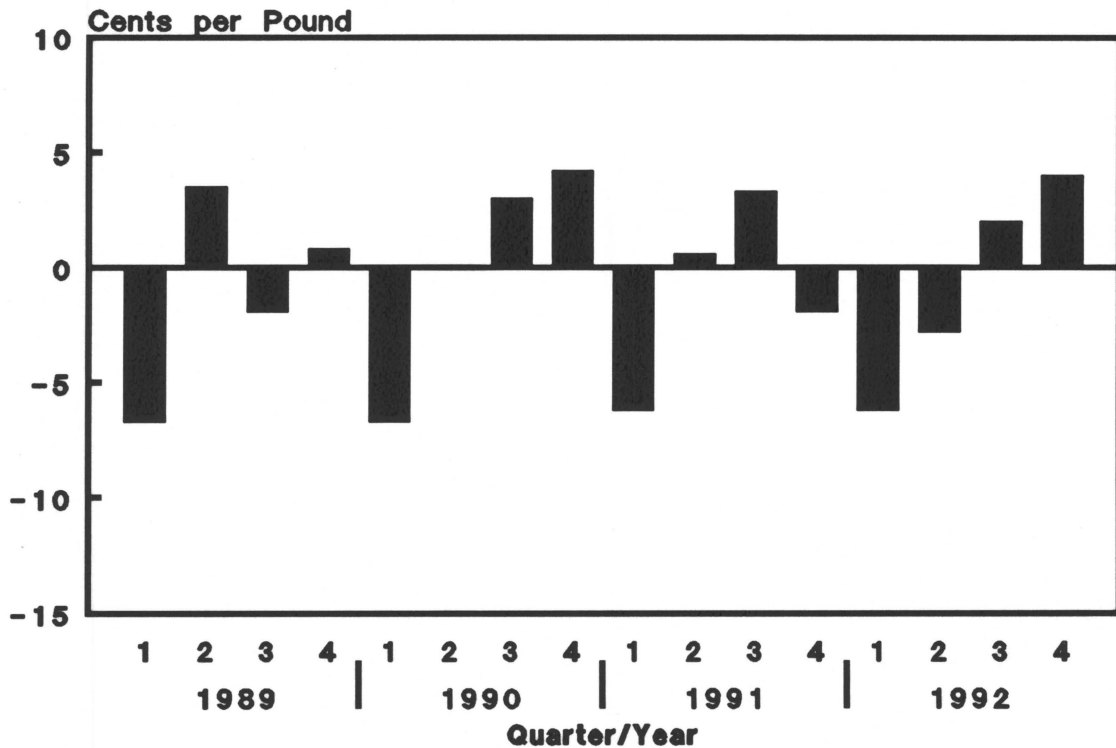
1992/3-4 Estimated

GROWTH OF TURKEY PRODUCTION IN THE U.S.



1992/3-4 Estimated

TURKEY PRODUCTION RETURN



1992/3-4 Estimated

U.S. SUPPLY FACTORS

<u>YEAR</u>	<u>NUMBER OF COWS</u>	<u>PRODUCTION PER COW</u>
	(Thousands)	(Lbs.)
1986 *	10,773	13,285
1987 *	10,327	13,819
1988	10,262	14,145
1989	10,126	14,244
1990	10,127	14,646
1991 p	9,990	14,867
1992 f	9,840	15,350
1993 f	9,760	15,700

* Whole Herd Buyout in place last 9 months of 1986 and first 9 months of 1987.

p = preliminary, f = forecast

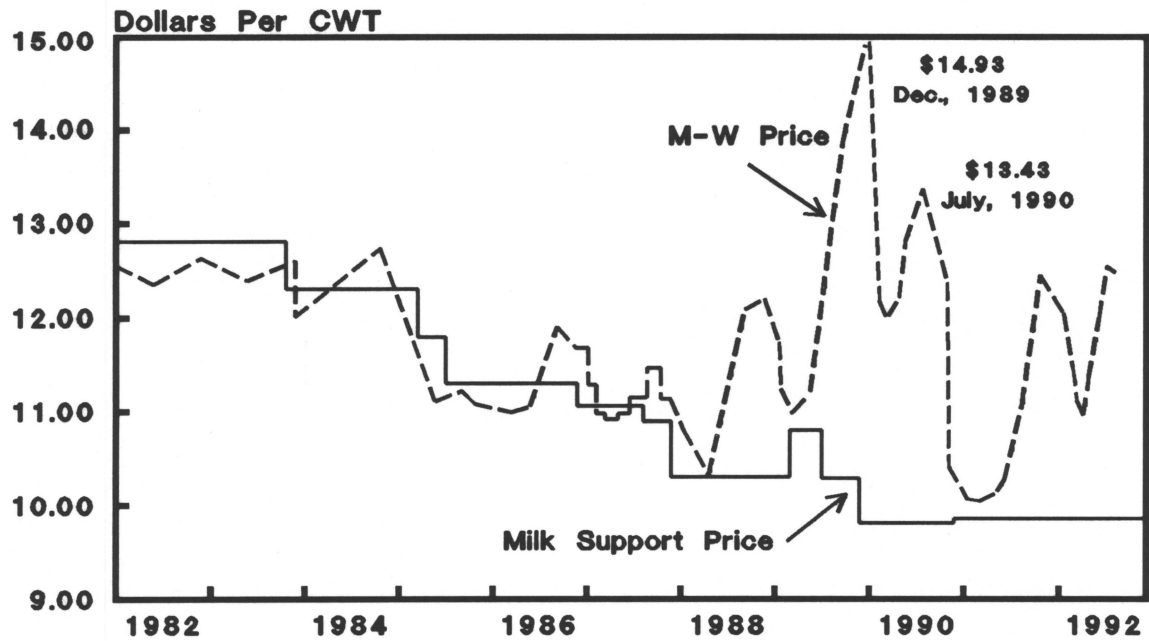
U.S. PRODUCTION AND DEMAND

<u>YEAR</u>	<u>MILK PRODUCTION</u>	<u>COMMERCIAL DEMAND</u>	<u>CCC PURCHASES</u>
	----- (Billion Lbs.) -----		
1986	143.1	133.3	10.8
1987	142.7	135.6	6.8
1988	145.2	136.8	9.1
1989	144.2	135.4	9.4
1990	148.3	138.9	9.0
1991 p	148.5	139.4	10.4
1992 f	151.1	141.8	9.5
1993 f	152.3	143.1	9.7

p = preliminary, f = forecast

CCC purchases stated on milkfat basis

DAIRY SUPPORT PRICE AND MINNESOTA-WISCONSIN PRICE, 3.5% BF, 1982-1992



U.S. MILK-TO-FEED PRICE RATIO

